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Journal

ANNUAL ELECTION RESULTS

TO THE CHAIRMAN OF THE GENERAL MEETING, TUESDAY, 25 JUNE 1946

The Scrutineers appointed to count the votes for the Election of the Council for the Session 1946-1947 beg to report as follows :

2,753 envelopes were received—670 from Fellows, 1,441 from Associates, and 642 from Licentiates.

The result of the election is as follows :

COUNCIL, 1946-1947

PRESIDENT :

MR. LANCELOT HERMAN KEAY (Liverpool) (unopposed).

PAST PRESIDENTS :

MR. WILLIAM HENRY ANSELL (unopposed).

SIR PERCY EDWARD THOMAS (Cardiff) (unopposed).

Members of Council

Elected		*Votes*
1.	THOMAS CECIL HOWITT	1,339
2.	CECIL GEORGE STILLMAN	1,301
3.	VICTOR BAIN	1,077
4.	ARTHUR CHARLES BUNCH	960
5.	JOHN SWARBRICK	948
6.	STANLEY WAYMAN MILBURN	708
Not Elected		*Votes*
7.	ANTHONY MERLOTT CHITTY	688
8.	CHARLES HERBERT ASLIN	618
9.	LEONARD CECIL HOWITT	606
10.	GORDON STEPHENSON	522
11.	HENRY THOMAS SEWARD / JOYCE ELEANOR TOWNSEND	466 / 466
13.	HERBERT JACKSON	403
14.	JOHN RALPH EDWARDS	402
15.	CHRISTOPHER DAVID GEORGE NICHOLSON	401
16.	RAGLAN HUGH ANSTRUTHER SQUIRE	386
17.	FRANK REGINALD STEELE	369
18.	JOHN CHIENE SHEPHERD	350
19.	JOHN PRICE NUNN	347
20.	VIVIAN LESLIE NASH	342
21.	HOWARD LESLIE VICARS LOBB	338
22.	ALEXANDER FREDERICK ANDERSON	318
23.	JOHN WALTER MACKENZIE DUDDING	294
24.	MARK HARTLAND THOMAS	269
25.	ARTHUR EDWARD HENSON	248
26.	THOMAS NELSON CARTWRIGHT	245
Not Elected		*Vote*
27.	DAVID DOMINIC SCOTT STOKES	181
28.	FREDERICK BARBER	141

2,727 Voting Papers were received, of which 18 were invalid.

Associate Members of Council

Elected		*Votes*
1.	WILLIAM GRAHAM HOLFORD	1,481
2.	REGINALD HAROLD UREN	843
3.	JOSEPH LEA GLEAVE	598
Not Elected		*Votes*
4.	JAMES THOMAS CASTLE	441
5.	ARTHUR GEORGE LING	418
6.	WILLIAM EDEN TATTON BROWN	380
7.	BIRKIN HAWARD	379
8.	KENNETH JOHN CAMPBELL	362
9.	LEONARD ROWLAND STEDMAN	359
10.	PERCY EDWARD ALLEN JOHNSON-MARSHALL	326
11.	HENRY THOMAS CADBURY BROWN	312
12.	COLIN ST. CLAIR RYCROFT OAKES	296
13.	GEORGE LEE GREAVES	272
14.	JOHN HARRISON	255
15.	WALTER WILLIAM FISK	183
16.	STIRRAT ANDREW WILLIAM JOHNSON-MARSHALL	164
17.	EDMUND DOUGLASS JEFFERISS MATHEWS	136
18.	WINSTON WALKER	109
19.	FRANK CHARLES OTTON	102

2,683 Voting Papers were received, of which 19 were invalid.

Licentiate Members of Council

Elected		*Votes*
1.	WILLIAM DOBSON CHAPMAN	448
Not Elected		*Votes*
2.	CLARENCE BERTRAM PARKES	436
3.	HENRY JOHN EVERETT PYNE	380
4.	GUY HERBERT NICHOLLS / FREDERICK CHARLES WAKEFORD	280 / 280
6.	GWYN HENRY MORRIS	257
7.	HARRY NORMAN HAINE	181

2,191 Voting Papers were received, of which 19 were invalid.

Representatives of Allied Societies in the United Kingdom or the Irish Free State

(1) *Six Representatives from the Northern Province of England :*
MR. ROBERT NORMAN MACKELLAR (Northern Architectural Association).
MR. JOHN SOMERVILLE BEAUMONT (Manchester Society of Architects).
MR. THOMAS MACKELVIE ALEXANDER (Liverpool Architectural Society).
MR. WILLIAM EDWARD BISCOMB (York and East Yorkshire Architectural Society).
MR. NORVAL ROWALLAN PAXTON (West Yorkshire Society of Architects).
MR. DAVID BARNES JENKINSON (Sheffield, South Yorkshire and District Society of Architects and Surveyors).

(2) *Five Representatives from the Midland Province of England :*
MR. SAMUEL JOSEPH STAINTON (Birmingham and Five Counties Architectural Association).
MR. FRANK HENRY JONES (Leicester and Leicestershire Society of Architects).
MR. WALTER REGINALD STEEL (Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects).
MR. FRANK ARTHUR BROADHEAD (Nottingham, Derby and Lincoln Architectural Society).
MR. ARTHUR GILBERT BERRY (East Anglian Society of Architects).

(3) *Six Representatives from the Southern Province of England :*
MR. FREDERICK JOHN TAYLOR (Devon and Cornwall Architectural Society).
MR. SAMUEL ERNEST URWIN (Wessex Society of Architects).
MR. RICHARD GREAVES BROCKLEHURST (Berks, Bucks and Oxon Architectural Association).
MR. ANTOINE ENGLEBERT GEENS (Hampshire and Isle of Wight Architectural Association).
One Representative to be nominated by the Essex, Cambridge and Hertfordshire Society of Architects.
One Representative to be nominated by the South-Eastern Society of Architects.

(4) *Four Representatives of Allied Societies in Scotland :*
Nominated by the Council of the Royal Incorporation of Architects in Scotland :
MR. ANDREW GRAHAM HENDERSON (Glasgow).
MR. LOCKHART WHITEFORD HUTSON (Hamilton).
MR. ALEXANDER NISBET MALCOLM (Stirling).
MR. CHARLES EDWARD TWEEDIE (Edinburgh).

(5) *One Representative of Allied Societies in Wales :*
Nominated by the Council of the South Wales Institute of Architects :
MR. JOHNSON BLACKETT (Newport, Mon.).

(6) *Two Representatives of Allied Societies in Ireland :*
MR. HENRY HOUGHTON HILL (Royal Institute of the Architects of Ireland).
MR. ROBERT HANNA GIBSON (Royal Society of Ulster Architects).

Representatives of Allied Societies in the British Dominions Overseas

To be nominated by the Councils of each of the following :
The Royal Architectural Institute of Canada.
The Royal Australian Institute of Architects.
The New Zealand Institute of Architects.
The Institute of South African Architects.
The Indian Institute of Architects.

Representative of the Architectural Association (London)

MR. GRAHAM RICHARDS DAWBARN.

Representative of the Association of Architects, Surveyors and Technical Assistants (now the Association of Building Technicians)

MR. ANDREW CHARLES HUGH BOYD.

Chairman of the Board of Architectural Education

MR. ARTHUR BEDFORD KNAPP-FISHER.

Chairman of the R.I.B.A. Registration Committee

MR. DARCY BRADDELL.

Chairman of the R.I.B.A. Official Architects' Committee

(To be appointed).

Representative of the R.I.B.A. Salaried Members' Committee

(To be appointed).

Chairman of the R.I.B.A. Allied Societies' Conference

MR. CYRIL FREDERICK MARTIN (Birmingham).

Honorary Auditors

MR. ERNEST BUDGE GLANFIELD (unopposed).
MR. JOHN NEWENHAM SUMMERSON (unopposed).

Scrutineers
ERNEST G. ALLEN [*F.*], *Chairman*
C. J. EPRIL [*F.*]
A. FOSTER [*F.*]
H. VICTOR KERR [*F.*]
G. H. FIELDER [*A.*]
C. H. PERKINS [*A.*]
CHARLES SYKES [*A.*]
FRANK WOODWARD [*A.*]
G. A. COOMBE [*L.*]
H. L. KELLY [*A.*]
E. T. SARGENT [*A.*]
E. D. LYONS [*A.*]

20 June 1946.

OFFICERS FOR THE SESSION 1946-47

The following officers were elected at the Council Meeting on 9 July :

Vice-Presidents :
JOHN MURRAY EASTON [*F.*]
CYRIL FREDERICK MARTIN, M.C., M.A. [*F.*]
CECIL GEORGE STILLMAN [*F.*]
MICHAEL THEODORE WATERHOUSE, M.C., B.A. [*F.*]

Honorary Secretary:
ARTHUR LEONARD ROBERTS [*F.*]

Honorary Treasurer:
JOHN LEOPOLD DENMAN, J.P. [*F.*]

ANNUAL RECEPTION

In spite of being "austerity," the first post-war Annual Reception at the R.I.B.A. was generally voted a great success. The building was full, without being uncomfortably crowded, with a distinguished gathering of guests and members. The war-time coating of air-borne dirt had been removed from walls and ceilings by weeks of strenuous washing and polishing by the house staff who, being mostly ex-Royal Navy men, have high standards in this respect. The building looked clean and shining, the decorative lighting was once more in full use and the flower groupings made up in colour for the lack of gay evening frocks.

Perhaps we can now say that there had been some who doubted the wisdom of holding this function just now. Any doubters should have heard the comments, as we did, of a group of representative guests from other cultural and professional bodies met in a corner of the Henry Florence Hall. These men were unanimous in praising the foresight of the Royal Institute in holding so essentially a peace-time, normal function. They recognised its public prestige value in governmental and cultural circles. A list of the Council's guests is given on page 418.

THE SWISS EXHIBITION

More details of the Exhibition of Swiss Planning and Architecture, announced in the May JOURNAL, are now available. The exhibition is to be held at the R.I.B.A. from 19 September to 26 October and will have the title "Switzerland." It will be the first comprehensive exhibition of Swiss architecture ever held in London. The foremost Swiss architects and associations have co-operated with the Swiss Government in presenting a complete picture of building and planning in a country unravaged by war.

Swiss architecture during the last twenty years or so has shown strongly the influence of the modern movement envisaged from the social angle. Although the country was in a state of armed preparedness during the war and building was curtailed, progressive ideas remained unhampered and are demonstrated in the many buildings which will be shown. Building for work, building for recreation, housing, town and country planning, schools and hospitals are among the subjects being covered. The development of a national architecture through the centuries will be a feature of the exhibition.

Ministry of Fuel and Power Conference

The important conference "Modern Heating and the Architect," announced on page 385 of this number of the JOURNAL and for which a reply slip has been enclosed, is an event which architects, particularly those concerned with housing, should not miss. It is a platitude that the fuel position of this country has undergone a radical and *permanent* change. The days of cheap coal are gone for ever. To-day it is necessary to extract the greatest possible efficiency from the coal consumed, whether it be in the form of solid fuel, gas or electricity. Therefore inefficient appliances must go and the overall thermal insulation of dwellings must be improved. The object of the Ministry in organising this conference is partly to tell architects what should and can be done about it and partly to secure their advice and support. The Conference will be reported in the JOURNAL for those who are unable to attend, but reading a report is not a fully satisfactory substitute for attendance. Members are advised to apply early for seats as accommodation will be limited.

The Director B.R.S.

Dr. F. M. Lea, O.B.E., D.Sc., has been appointed Director of the Building Research Station in place of Mr. I. G. Evans, who has been appointed an Assistant Secretary in the Department of Scientific and Industrial Research, of which B.R.S. is a section. We present our congratulations to both. We would also like to acknowledge the past services of Mr. Evans in maintaining good relations between the R.I.B.A. and B.R.S.; in particular his help and support to the Architectural Science Board have been invaluable. Dr. Lea is a chemist who has been on the staff of B.R.S. for many years. His first study was on the fundamental structure of cement and he is now the country's leading expert on cement chemistry. Latterly he has been Assistant Director in charge of all laboratory work.

Mr. L. H. KEAY, O.B.E., President R.I.B.A., 1946-47

Westminster Housing Competition

The premiated designs in the Westminster Housing Competition are to be on view at the R.I.B.A. from 16 July to 31 July. This is the first step in a new policy whereby premiated designs in important competitions will be placed on view to members in the R.I.B.A. The arrangements will be in the charge of the Public Relations Committee, who will exhibit the premiated designs of competitions as recommended by the Competitions Committee.

Closing of The Library

It is expected that the Library will be closed from 22 July to 31 August, to reopen in its normal premises on the third and fourth floors on 2 September, 1946. Should any adjustments have to be made in these dates, an announcement will be made in the architectural weekly press. It is hoped to keep current periodicals available. In cases of extreme urgency only will it be possible to issue books on loan during the period in question.

Birthday Honours List

The following names and honours have been extracted from the Civil List :—

K.C.B.—John P. R. Maud, C.B.E., Permanent Secretary, Ministry of Education.

K.B.E.—E. N. de Normann, C.B., Deputy Secretary, Ministry of Works.

C.B.E.—Alexander Gunn, Principal Assistant Secretary, Ministry of Labour and National Service; George Hicks, M.P. [*Hon. A.*], Dr. Dudley Stamp, Sydney Tatchell [*F.*], Professor W. Norman Thomas [*F.*].

O.B.E.—William Alexander Ross [*F.*] (Ministry of Works).

M.B.E. (Civil Division).—Henry Elder [*L.*].

I.S.O.—William Lindsay, Architect-in-Chief, South Australia.

From the New Year Honours List

O.B.E. (Civil Division).—Frederick James Powell [*L.*].

THE PLACE OF THE ARCHITECT IN THE POST-WAR WORLD

GERALD BARRY [*Hon. A.*]

A PAPER READ AT AN INFORMAL MEETING ON TUESDAY, 25 JUNE, 194

THE PRESIDENT IN THE CHAIR

Much of what I as a layman have to say this evening is bound, I fear, to sound self-evident in the ears of men and women whose life and work are devoted to architecture. Indeed, ever since I accepted your kind invitation to address you, by which I naturally felt much honoured, I have been attempting to console myself for my temerity with the lenient criticism of Dr. Johnson on the woman preacher. "Sir," said the Doctor, as you will remember, "A woman's preaching is like a dog's walking on his hinder legs. It is not done well; but you are surprised to find it done at all." If I speak on "The place of the Architect in the Post-War World," I do so as one convinced of the crucial importance of architecture, in its widest application, to the social life of our age. If you ask me the place of the architect in the post-war world, I reply without hesitation that his place is plumb at the centre of it.

It was a Viennese *chef*, I believe, who, when called upon to define the arts, declared that "there are three branches of art, painting, music, and ornamental pastry-work—of the last of which," he added, "architecture is an honourable sub-division." Calling to mind some of the interiors and exteriors which I have observed in the course of prolonged and sometimes painful architectural sight-seeing, I can understand his point of view. But it is lamentable that so many people to-day share the opinion that architecture is some sort of inferior craft which they can ignore, or that it is something which does not concern them. No one can ignore architecture, even if he wants to. That, indeed is the trouble. We live out our lives surrounded by architecture: good, bad or indifferent, we perpetually imbibe influences from it, from the day when we gaze up from our nurse's knee at the cracks in the plaster-work of the ceiling, approximately to the day when the undertaker curses at the awkward design of the staircase. For this reason, if for no better, architecture ought to be the most popular and the best understood of the arts. There it is, staring us in the face, morning, noon and night. It influences our taste unconsciously, just as, for example, the films do—indeed, more constantly and with even less effort on our part. For architecture you don't have to go to a gallery or a museum or a concert hall, or even to a bookshop: you have only to look out of the window or across the room.

Thus, from the æsthetic point of view, it matters enormously that the buildings which the ordinary citizen and his wife and children look at and live in shall be good. From the social point of view, of course, it matters even more. Architecture, in short, is the art which more than any of its fellows directly affects every man and woman in their daily lives.

Because of the sheer amount of building now to be done, this is truer than ever of this post-war world of to-day. What a world! What a world of ruin and destruction, but—by that token—of responsibility and opportunity. The vast extent of replanning and rebuilding waiting to be done in Britain and Europe almost baffles comprehension. But what a challenge it is, what a call to the learning, skill and imagination of the architects of our time! When I was in Germany last winter I discovered that the German authorities, before their final defeat, had drawn up a plan for the reconstruction of the ruined Ruhr. The first eight years of that plan were to have been devoted to clearing away the rubble. No question here of rehabilitation, of patching or filling-in gaps. The whole huge area must be cleared and replanned from zero. In Britain, purely from the point of view of large-scale replanning, it has sometimes cynically been said that the Luftwaffe might have been more efficient. But what with the destruction by bombing, the leeway in normal building during the war years, and the even greater leeway of the years preceding the war, there are surely arrears enough and opportunity enough to satisfy the most ambitious.

But when quantity and speed become of first importance, the architect is faced with an obvious handicap: there is less time to pay attention to beauty and finesse. Mass destruction ordains mass production, and mass production, in its current manifestations, tends to be the enemy of space and grace. Contemplating the exteriors of some of the prefabricated dwellings that have begun to sprout up like clumps of malformed fungus on London's bombed sites, we may be tempted to reflect that, if we asked for functionalism, now we are being punished. Considered as what Le Corbusier called "machines for living in," these little rectangular contrivances are quite efficient: but I have yet to meet anyone prepared to defend them as an æsthetic addition to our townscape.

I mention this, in passing, only as an obvious way of emphasising the manner in which the architect's problem has been vexed by the abnormal demands of the moment. We shall have to do a lot of catching up before we can reach a period of stability, with a reasonably constant population, and with the whole of that population well enough housed, to allow architects to concentrate wholly on elegance. From the time of the industrial revolution onwards, architecture has never got on level terms with this problem, and now the problem has been aggravated all over again. Nevertheless, the millions of buildings—and I am speaking at the moment only of domestic architecture—which must go up in the next decade will largely determine the outward face of Britain for several generations, just as the buildings that went up by scores of thousands in the period of Victorian expansion still, alas, determine the face of our cities and towns this very day. But there is a difference, and a vital one, and it is this: that the architect is coming into his own again—in a new way adapted to our new conditions, but as he has not done since the industrial revolution abandoned architecture in favour of the jerry-builder.

There have always, of course, been good architects and fine buildings, even during the worst excesses of the nineteenth century and the first half of the twentieth—plenty of them, if one knew where to look. But it is not isolated buildings, however exquisite or resplendent, that make beautiful towns and villages—especially in an age of mass development like ours. Nor can the existence of even a large number of isolated good buildings constitute a national style. What British architecture is moving

towards to-day, with the development of new materials and techniques—and what it needs—is a new national style. But what alone can constitute a national architectural style is the general run of buildings, the quality of buildings together, in a street, or a neighbourhood, or a region. We have only to look at the buildings of the Cotswold region, as an example; or, indeed, to the general effect throughout the length and breadth of this island of the whole Georgian period of architecture. *There* was a national style, which marked and beautified the whole face of England! Some of it was planned, much of it was haphazard; but because almost all of it conformed to a high standard, if often a simple standard, and because altogether there was a tremendous amount of it, the whole architectural character of our island was transformed.

Once again to-day, in the conditions prevailing at the end of the second world war, there is scope, despite the drawbacks we have noted, for building on a scale and of a dignity to affect the whole character of the land—on large cleared sites, in the new towns, and in the towns that are to be expanded, in much-needed replacements and additions to our villages. It is therefore demonstrably more important than at any time for a century that the quality of contemporary architecture should be fine. This alone emphasises the focal significance of the architect in this post-war world.

But when we designate the architect a figure of central importance in our modern life, we have something wider in mind than the designing of good buildings. We have in mind the fact that the good architect in the world of to-day has to be many things besides an artist: or rather, shall we say, that in order to be a good artist he has to master an ever-expanding range of knowledge and technique. "The architect," wrote Walter Gropius, "must be fully conscious of the age he is living in." This means that he must, in fact, be not only an artist but a carefully-educated, socially-conscious citizen. Building ought to grow out of the social structure of the age. So, to-day, we must have community building for a community-age, for history has turned its back on individualism—though not, pray God, on the individual.

Thus the architect of to-day and to-morrow is concerned more and more not merely with single buildings but with devising the living conditions of the community. He determines not only the shape of a building but the shape of a town. For while architecture must always remain the art of designing efficient and beautiful buildings, the architect has become much more than an architect in the narrow sense of the term. Nowadays he must have knowledge of several crafts and sciences—of various branches of engineering and of manufacture, and also of numerous aspects of economics and sociology. He must study problems of communications and transport, of housing in its sociological or local government sense, of education if he is building for a community, of population trends, of the location of industry, of the requirements of agriculture—and, above all, of land values and land ownership. Indeed, it has been well said that the future of architecture is bound up with the future of property. He must be concerned with such not wholly artistic matters as the recommendations of that persistent triumvirate, Messrs. Uthwatt, Barlow and Scott. He must even, in the strictly non-party sense, be something of a politician. For since every good architect is concerned with the proper siting of his buildings in relation to the requirements and amenities of the neighbourhood, and with the comfort, health and general welfare of the people who will use his buildings, he cannot remain indifferent to those political matters which control the limits within which he is forced to plan, or that determine the social and economic conditions in which the community for whom he is planning must live.

In short, the architect of the post-war world is not only a designer of buildings but a planner and a co-ordinator. He is compelled more and more to become concerned not with single units only but with a neighbourhood. Town-planning, landscape gardening, a study of all the social sciences—these have become his provinces. I said just now that in our present age the architect is coming into his own again. In earlier centuries the chief patron of the architect for domestic buildings was the landowner or wealthy individual citizen or merchant. When the mass-building of the nineteenth century began, those who ordered it did not look to the architect, nor have they done so enough since. But in this mid-twentieth century period, when mass-building is still called for, the State and the local authority are more and more becoming the patrons. And these patrons must turn increasingly to the architects and town-planners to draw up and design their schemes, in protection against the anarchy of the speculative builder. In a planned epoch—as ours is now becoming—the planner is a key man, and nowadays the planner and the architect tend to become one. We have only to rencal some famous living names to know that this is true. No longer does the patron, a single individual, order a single building: the patron, the community, orders a community plan. In this way the architect may find his proper relationship to society in the conditions of our time.

Although mass-production and prefabrication have altered relationships, the architect-planner now has control over such large units of building that he is once again able to wield a direct influence on the face of the landscape. Thus, perhaps, in a roundabout way, the divorce of art from construction against which William Morris and his friends rightly revolted, is now in a fair way to being resolved. Art and machinery have an opportunity to come to terms.

But such detailed synthesis of such a wide range of knowledge as we have seen is now required of the up-to-date modern architect—particularly in such an age of specialists as ours—would demand that every member of the architectural profession should be a Francis Bacon or a Leonardo da Vinci, as well as a Christopher Wren in his own right. It is for this reason that the group system which has come into vogue among architects in recent years seems to fit the conditions of the times, each member of the group contributing his own specialised knowledge and skilll to the designing of a shared job. In the large-scale planning and building which challenges the talent of our time it is natural that architects should resort to team-work. This system has produced some significant results, and seems likely to be increasingly favoured in the future. In an ideal team all could co-operate—architect, painter, sculptor, landscape gardener, engineer. Not every architect singly can be a master of all the manifold and intricate factors involved in the scale and complexity of our post-war building programme. But working together on these problems, architects and their fellow artists and craftsmen can fulfil one of the prime needs of this beauty-starved age.

So we have established this: that both as an artist largely responsible for the good looks of our land, and as a social designer largely responsible for the health, comfort and efficiency of our people, the architect in the post-war world occupies a position of cardinal importance.

Having thus fixed the position of the architect in the world, the necessary question to consider is, "What sort of world is it going to be?" That, I imagine, is the baffling question which the architect himself must to-day be continually asking. The sort of architecture to design for the future must plainly depend on what sort of future there is going to be. There can have been no previous period in history when the future shape and condition of the world were so uncertain, and at the same time open to so many new and exciting possibilities, as the period we are living through to-day. New materials, new sources of energy, new means of communication, new political tendencies fundamentally modifying man's way of life—how are we to plan and build for a world so fluid and so unpredictable? Atomic energy, jet-propulsion, television—how will these discoveries affect

architectural design and town and regional planning? In the political fields, will there be socialism or capitalism, peace or war? If socialism holds the future, then the economic and political philosophy of such an age must surely affect architectural planning. As a small example, what Professor Sir Charles Reilly calls "suburban snobbery" will tend to disappear in favour of more neighbourly design.

And atomic energy. Are we to consider atomic energy in terms of war—in terms, that is, of constructions designed to enable the population to conduct its affairs several hundred feet below ground? Or in terms of peace—in terms of buildings in which atomic energy will, perhaps even before some of the buildings now being designed have been erected, have rendered obsolete all present forms of power and heat and transport and their architectural accompaniments. The use of atomic energy for all public and private purposes will presumably fundamentally modify both the design and equipment of individual buildings of all sorts, and the layout of town and region. And what will become of existing buildings when the advent of atomic energy makes them suddenly prehistoric? Shall we have to set to work to replan the whole of Britain, to rehouse the whole population? The architect has always been continually concerned with the factor of space. Now he has to consider both time and space in radically modified conceptions and implications. Consider, too, the influence of the revolution in movement upon architectural style. Surely the lightning speed and mobility of this airy, supersonic age, with the new materials and methods of construction now available, must modify the tradition of design, as decisively as they have modified its requirements.

But let us assume that in the age ahead of us, whatever uncertainties there may be, mass-production, and what for short we may call mass-planning, are reasonable staples: then architecture's task is to adapt itself to these conditions to the best advantage. The contemporary approach to architecture must necessarily correspond with the technical civilisation of the age. It is equally true that it must also correspond with the social civilisation of the age. By discovery and invention, by political and economic developments, both the needs and the direction of society are changing—as well, of course, as its opportunities. Advances in transport and communications have profoundly modified past conceptions of the ideal unit. Centralisation is no longer, perhaps, so important. And as intercommunications grow more simple and more rapid, so the size in which the unit is conceived enlarges, at the same time as its density tends to decrease. For many purposes it is no longer sufficient to plan in terms of a locality: we have to plan in terms of the region. Another and an almost hackneyed aspect of the expansion problem is that against the advantages of swift and ample communications has to be balanced the need to conserve the amenities and pastoral beauties of our small island.

This particular aspect of the problem has now been widely recognised for at least a quarter of a century—though not invariably acted upon. It is, of course, one of the uppermost factors (though by no means the only one) in the long and hotly-contended controversy over small houses *versus* blocks of flats—horizontal spread *versus* vertical spread. I am not going to invite execution by entering the lists in that battle: I only mention it to draw attention to one thing. In this controversy we can discern the elements of something which is crucial to sound social planning but which often gets neglected, and that is—the weighing of what, for want of a less sententious phrase, I must call "the spiritual imponderables." For against certain practical advantages in favour of the blocks of flats has to be set an imponderable of enormous importance, to wit, the English character. I am not saying that this settles the issue in favour of the small house (personally I believe in some of both) but where a people show an instinctive preference for a particular type of housing because their natural genius thrives in it, why then that is a consideration which can be ignored only at the risk of a fatal frustration. We may destroy even as we build.

This leads me directly to what is perhaps the central issue facing us to-day. All the technical wisdom in the world will not suffice us to build for a dynamic society unless we take into account the moral and spiritual values. "All men come together in cities in order to live," said Aristotle. "They remain together in order to live the good life." We have so to plan and build our cities that the people who live in them may lead a balanced, rewarding life, that they may not merely suffer an efficient existence but may fulfil and enrich their humanity. In countries where the war has wrought great havoc, this touches the difficult question of priorities. It is noticeable, for instance, that in broken Berlin to-day, where the population is living in hovels and patched houses, concert halls and theatres have been repaired and are thronged. It seems that these battered people feel the inner need of music and drama and that enjoyment of these arts holds them together and sustains them when materially all is so disastrous.

Planning for the good life is of peculiar importance and difficulty in an era of mass production and mass building such as this. We have to consider what sort of life we want and then how best to build to achieve it. As Mr. Lewis Mumford has written:

> "Subordinate questions—the spatial separation of industrial and domestic life, or the number of houses per acre, cannot be settled intelligently until more fundamental problems are answered: What sort of personality do we seek to foster and nurture? What kind of common life? What is the order of preference in our life-needs? Do we place babies above motor-cars or *vice versa?* Do we place schools staffed by able teachers above schools that have expensively-equipped workshops and laboratories, gymnasiums and swimming pools? Or, even more fundamentally, do we want schools or do we want clover-leaf road-junctions?"

Perfect planning, in other words, must—in addition to all the other considerations—make an almost anthropological approach to the problem, must certainly consider the biological and psychological needs of the people as well as their economic and commercial needs. For example, Mr. Mumford—who, whether or not we agree with all he says, is certainly a writer who probes to the roots of our modern urban culture—holds that the siting, layout and living conditions of our towns directly affect the physical and cultural virility of a people. He has produced a theory of the relation between housing conditions and the rise or decline of population, the effect of unbalanced living on the moral welfare of a community, and its positive influence on the will to breed. In criticising the new plan for greater London, he has urged the paramount importance of a population policy as an essential background to the kind of urban layout for which we ought to plan. Without going all the way with Mr. Mumford—and recognising also, as perhaps he cannot, that under the urgent physical compulsions of 1946 we are not able to plan in an ideological vacuum and are forced by circumstances to be somewhat more empirical and less profound—in spite of this I would venture to suggest that, for a people whose population trend has become of critical importance to their future survival, as ours has, these are considerations which we cannot afford to ignore.

An immense responsibility rests upon architecture to restore order and beauty to our world. In a way the architect's problem is the same as the world's problem. The crisis facing our twentieth century civilisation is to combine order with individuality, controls with essential freedom. This also is the architect's problem—to *build* order with individuality, to bring individuality, grace and variety into the deadening uniformity of modern living. It is the artist who can assert the dignity of the individual and satisfy the claims of the spirit, amid the strangling regimentation and frustration of our time, which so readily breed dictators. It is not enough to replan the structure, we must also reanimate the spirit. We are concerned not merely

with utilitarianism but with art, not merely with mechanism but with culture. We must plan and build, not for a race of efficient and comfortable robots, but for a race of happy people.

This means that in order to build right we must think right. Good architecture can be built only on the foundation of a sound philosophy of life, of living. It could be argued that the decline in architecture which accompanied the industrial chaos of the nineteenth and early twentieth centuries was a symptom of the loss of balance and serenity which afflicted the mind of that period. It is worth a reflection, in passing, that the new architectural style which had developed in Germany between the wars and which promised so well, should have withered at the touch of Fascism. If we are to build and plan aright we must have faith in ourselves and in the future. The current age is a little too apt to concentrate on quick returns. This is a symptom of our uncertainty. We rush to recoup what we can while we can, doubting the future. Look how the eighteenth century, although it was a materialistic age, planned for posterity. They laid out parks in which the trees they planted would grow to maturity neither in their own lifetime nor in their sons'. The landscape gardeners of that Augustan age planned for the third and fourth generation. There was an age which believed in itself and in the future—and what a lot, in consequence, we owe to it to-day! May the generation of a century hence give thanks to the architects and planners of to-day, as we give thanks to our forebears.

You do not need to be a Spengler to believe that something has gone awry with our civilisation. Even a superficial survey of the material and spiritual conditions of ruined Europe in the aftermath of the second world war leave one with the fear that, mid-way through this twentieth century of ours, it is touch-and-go whether our Western culture will survive. Whether it does so, and how strong and complete the recovery will be, depends on the faith and courage of those whose task it is to rebuild. While I was preparing this paper I came across a copy of the May number of *Horizon*, in which there is an article by my friend Maxwell Fry that exactly expresses what I mean, and says it so well that I beg his permission to quote him. Declaring that it will be useless to attempt to make good the material damage of war without restoring the spirit, he goes on: "I do not think it is the material aspect of reconstruction we have to measure in estimating the future of architecture, but the extent of belief in ourselves and our capacity to live courageously and well in the circumstances allotted to us." If our generation has belief in itself and in its destiny it will produce the artists and technicians, the men of vision and the men of reason, to do the job. The very continuance of our civilisation is at stake—and what a future of unimagined splendour it can have! For myself, I am full of hope, for the war proved to us what resources of energy, courage and imagination reside in the youth of every land, and what a deep longing for fulfilment now possesses them. To architects belongs a special opportunity, because, as we have seen, the art of architecture is the art of living.

DISCUSSION

The PRESIDENT: I call upon Professor Basil Ward, chairman of the Public Relations Committee, to move a vote of thanks to Mr. Barry.

PROFESSOR BASIL WARD [*F.*]: Were it not for this duty, which is a very pleasant one, I feel that I should like to emphasise the splendid opportunity which this occasion affords me, as the chairman of the Public Relations Committee, to talk with or at or upon a great editor of a great daily newspaper—almost the dream of any public relations officer. But I should, however, be completely disarmed, even if I had wished to take that line, by Mr. Barry's splendid paper, a most profound paper, of great breath. Personally, I am very grateful to him for touching as he did upon the humanities, a field in which there is a very proper place for the architect. I have very great pleasure in proposing this vote of thanks to Mr. Gerald Barry for his excellent paper.

The PRESIDENT: I call upon Mr. John Summerson, Curator of the Sir John Soane's Museum, to second the vote of thanks.

MR. JOHN SUMMERSON, F.S.A. [*A.*]: It is certainly a very great pleasure to have Mr. Barry here. It takes two to make an architecture—the architect and the public—and to effect the marriage between the two nobody is in a more powerful position than the editor of a great daily newspaper. To hear such an editor talk in the way that Mr. Barry has talked this evening—in such a comprehensive, far-seeing way—seems to me quite admirable.

Mr. Barry's paper was, I think, tinged with optimism, and optimism is good for all of us up to a point, but only up to a point. I think that those of us who were thinking, while we listened to the paper, of our own professional affairs, must have seen from time to time some of the difficulties that the architect of to-day has to face—the difficulty, for instance, so well emphasised by Mr. Barry, of the enormous range which the architect is increasingly expected to cover. We are beginning to wonder, as we look into the future, exactly what is going to be expected of the architect, in which departments of life he will be able to hold his own on traditional lines, and in which departments of life other things, new things, will be expected of him. I should like to suggest that this is a problem which only the profession itself can solve for itself; in fact, to narrow it down, only this Institute can help with this very broad and very difficult problem.

I believe that we have now more statistics relating to the employment of the profession than we have ever had before, owing to the various questionnaires that were sent out during the war. I hope and believe that we shall use those statistics, and that this Institute will make it its business to watch the development of affairs, to watch the work of the profession, to see and analyse and probe into the ways in which architects are being employed and into what is expected of them, and, not least important, what ought to be expected of them, and to see that the architect maintains his place, which is, as we all believe and as Mr. Barry said, plumb in the middle of the picture.

There is, perhaps, a less optimistic and more problematic slant on Mr. Barry's subject. Obviously the post-war world is the architect's world, but I do not think that it is being handed to him on a plate. I have very much pleasure in seconding the vote of thanks to Mr. Barry.

MR. P. JOHNSON MARSHALL [*A.*]: I feel that Mr. Barry's talk this evening has thrown down a challenge to us. He has said many pleasant things about the architect which have probably made those of us here who are architects feel rather warm inside; he has made us feel that we are important people. He has also, as Mr. Summerson says, brought out the need for us to examine our own profession in relation to the job ahead, and he brought out the necessity in the architect for a social appreciation of his job. He has emphasised the need for the architect to be a co-ordinator, to be the cultural adviser of the community in which he happens to be.

When one considers the problem in those terms and then turns to the situation as it exists to-day, I feel that it is rather disquieting. I feel that the tremendous value of his paper lies in the fact that it brings home to us the need for analysing the work which has been done in the past by ourselves with other technicians and the methods of team work which he has hinted are necessary—teams not only of different kinds of architect,

but also of related technicians. Having done that, and having decided what sort of teams we shall need to tackle this problem, we shall have to consider—it has already received consideration, but it needs a great deal more study—the type of education which will be necessary in order to enable these teams to do the job that awaits them.

Taking just a casual glance at our technical education, I do not think it can be said to be adequate to enable us to carry out the work that lies ahead of us. I do not think that architectural education in its present state is strong enough or big enough. I think that we need to develop new forms of education, based, perhaps, on the researches of a famous architect mentioned by Mr. Barry, Professor Gropius. I think that the Bauhaus idea might be developed far more in terms of complete faculties, in which we would have not only our school of architecture but our building school and our planning school, and also departments of structural engineering, of heating, lighting and ventilating engineering, and of all the other related subjects which concern us as architects and town planners. I hope that we are capable of appreciating and taking advantage of the full significance of what Mr. Barry has put to us, and that we shall develop as soon as possible a really practical programme.

MR. LESLEY WOOD [*A.*]: I should like to make a remark or two on something that Mr. Barry said towards the beginning of his most enjoyable and heartening talk, namely, on the subject of the appreciation of architecture by the general public. I feel that our job, if it is to be at all successful, depends entirely on the public wanting architecture and knowing what it wants. At present I feel that the situation is very largely what Mr. Barry says it has been during the last hundred years; people see architecture all round them and just do not know that it is there; whether it is good, bad or indifferent, they have no opinion about it.

I firmly believe that to appreciate any art one has to practise it to some extent. There have been, I know, most admirable suggestions for the teaching of architectural appreciation in schools, but I feel that we should press for something beyond that; we should ask that architectural design, in its most elementary form, should become part of the curriculum of any scheme of general education. All the other arts have this advantage over architecture, that in the course of one's formal education one does learn to practise them to some very slight extent. Few people pass through school without some opportunity of doing a little modelling, composing a tune or writing a poem, and certainly literature enjoys the enormous advantage that every child practises English composition; yet no architectural composition and no formal composition of any kind seems to be practised in schools, either in the drawing class or outside it.

I suggest that part of every child's early education should consist of elementary architectural design and landscape design with the aid of models and rough sketches and whatever suits the aptitude of children best. I do not suggest that I can make any recommendations in that respect; it is a matter for our educationists who understand the mind of the child; but I feel that up to now architecture has been labouring under an immense disadvantage.

I believe that in the eighteenth century the widespread appreciation of architecture amongst its patrons was very much enhanced by the fact that in a dilettante way, and perhaps without much success, they practised themselves; many an English landowner did a little architectural design, and prided himself that he knew how to compose within the perhaps rather limited field of the Georgian use of the Orders. I believe that much the same thing accounted for the widespread appreciation of music during the time of Elizabeth, when a certain amount of perhaps not very successful composition went on much more widely than has ever happened since.

I would make the suggestion most seriously, therefore, that if architectural appreciation is to be soundly founded among the people of this country—and it is of the utmost importance to our future as architects that it should be; as Mr. Summerson said, we must know what is really expected of us—consideration should be given to architectural design of some kind or other forming a part of everybody's general education.

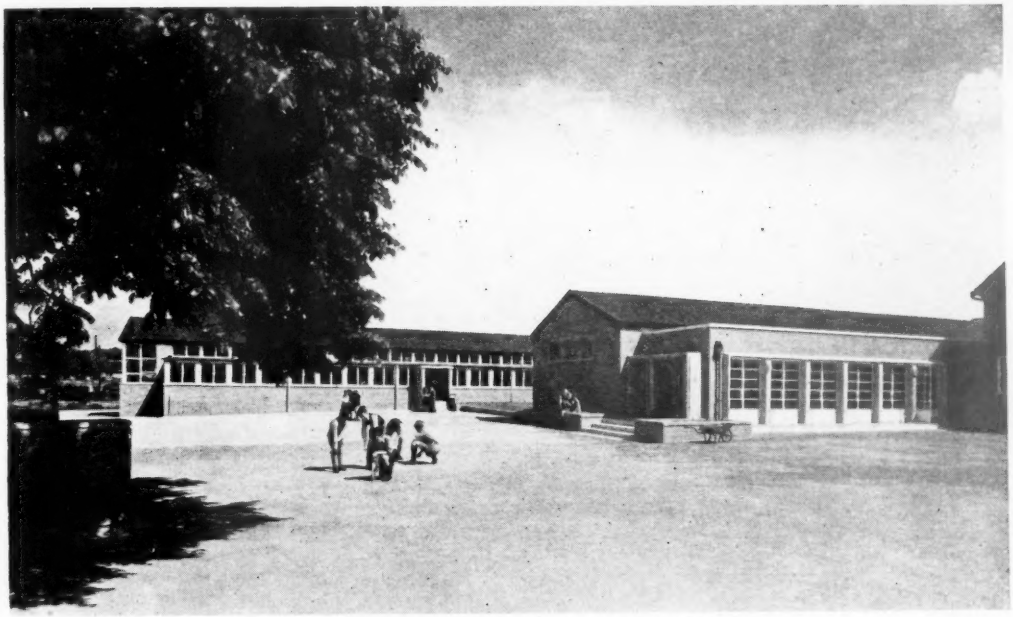
THE PRESIDENT AND THE R.I.B.A. STAFF

Informal Party on 18 June, 1946

The retiring President, Sir Percy Thomas, entertained the R.I.B.A. staff at an informal party on 18 June, when he thanked them for the help and support which they had given him during his term of office. His retirement from office brings a very real sense of personal loss because during his five years as President he took a very keen interest in every member of the staff and in the working of the R.I.B.A. "machine." During the last year, in particular, all departments have been reorganised and new ones set up, changes which, under his wise guidance, have been carried out without friction or loss of efficiency. On behalf of the JOURNAL staff we would like to acknowledge publicly the statesmanlike and practical advice with which he guided the formation of its new policy. To mark their esteem the staff presented Sir Percy with two books and a fountain pen. Later in the evening, the senior members of the staff entertained him to a theatre and supper.

The staff reorganisation which was begun under the direction of Sir Percy Thomas is not yet complete. The new Librarian and the Negotiating Officer are being appointed. The library is moving back this summer to its old quarters which are being altered, largely as a result of the experience of Mr. Carter, in order to extend its usefulness and improve its efficiency. The present library on the first floor is to become a members' lounge. As a result of increased activities the Institute is now acutely short of office space and must remain so until the extensions contemplated in Mr. Grey Wornum's original design can be carried out.

The Council entertained Mr. Carter to lunch on 18 June. In proposing his health, the President referred to the very great part Mr. Carter had played in the development of the Institute and congratulated him on the important position which he was taking up with U.N.E.S.C.O. His departure was greatly regretted by the members and staff. The Council were anxious to make some presentation to Mr. Carter in memory of his fifteen years' valuable service, and, at his request, a painting was being made of his house in Keats Grove, Hampstead. Mr. Graham Henderson [*F.*] spoke on behalf of the Royal Incorporation of Architects in Scotland, and Mr. Henry M. Fletcher [*F.*] spoke as one of the members of the old Literature Standing Committee which had originally selected Mr. Carter for the post of R.I.B.A. librarian.

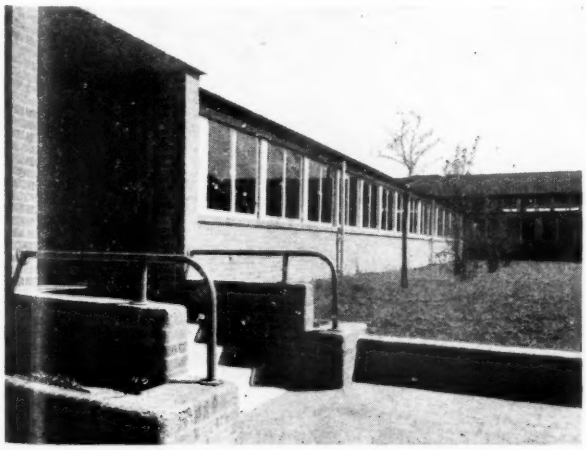


The new classroom wings at St. Audrey's School, Hatfield, Herts.

THE FIRST POST-WAR PERMANENT SCHOOLS

Architect: HOWARD V. LOBB [*F.*]

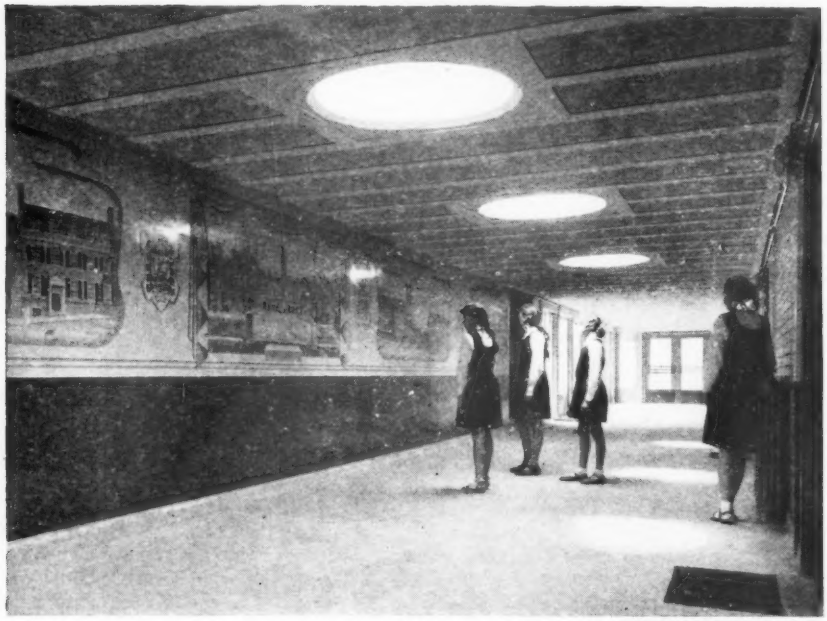
The system of construction for school buildings, recommended in the report of the R.I.B.A. School Design and Construction Committee, published in the April JOURNAL, has been used for the three new schools here illustrated. It will be remembered that the report strongly opposed the Ministry of Education's proposal to use hutments, on the grounds of their being sub-standard. The facts given in the report were based on the St. Audrey's School at Hatfield, then under construction. This school is a replacement of an older building which was wrecked by a flying bomb, from which only the hall survived. The new classroom wings are now completed and the building is to be officially opened by the Minister of Education, the Rt. Hon. Ellen Wilkinson, M.P., on 26 July. The other two schools are in process of erection in Middlesex and will replace an existing school taken over by the Government in connection with the enlargement of Northolt aerodrome. They were commissioned by the Ministry of Works on behalf of the Middlesex County Council.



Secondary entrance and classroom corridor at St. Audrey's.

The basis of the system is a steel framework of stanchions and trusses, standardised to a height and span to suit the officially-recommended classroom—plus—corridor sizes. The frame is erected first and the roof covered (with maroon-coloured R.P.M. sheeting in these three schools). Work then proceeds under cover; it is notable that at St. Audrey's not a single day was lost through wet time. The walls and partitions can be of any suitable material, either temporary or permanent, so that a temporarily finished building can be easily and cheaply changed to a more permanent one. These schools, being permanent, have been finished with brickwork.

The R.I.B.A. report argued that this system required only a few more man-hours than did equivalent accommodation in M.O.W. hutments, as recommended by the Ministry of Education. The final figures for St. Audrey's show that the man-hours were in the proportion of 4,724 (including 667 for steel-work erection), which compares favourably with the 3,972 required for hutments having a 7 ft. 6 in. storey height and 4,913 for hutments with stooling and dwarf walls under the hut framework to give the standard 11 ft. storey height. It is expected that the man-hour figures for the two later schools will be considerably better, because various modifications have been made to simplify erection.

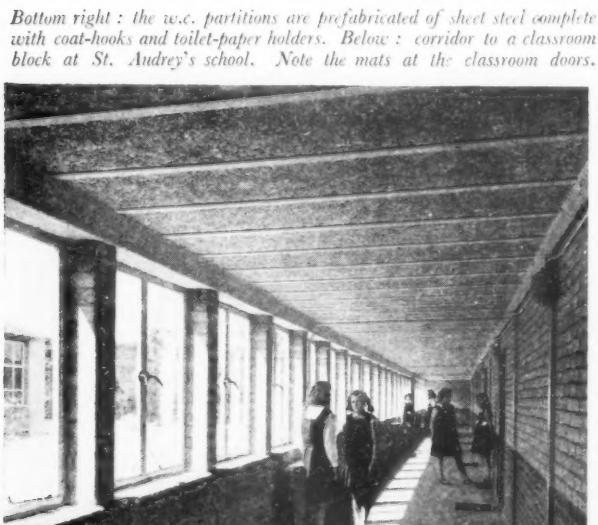


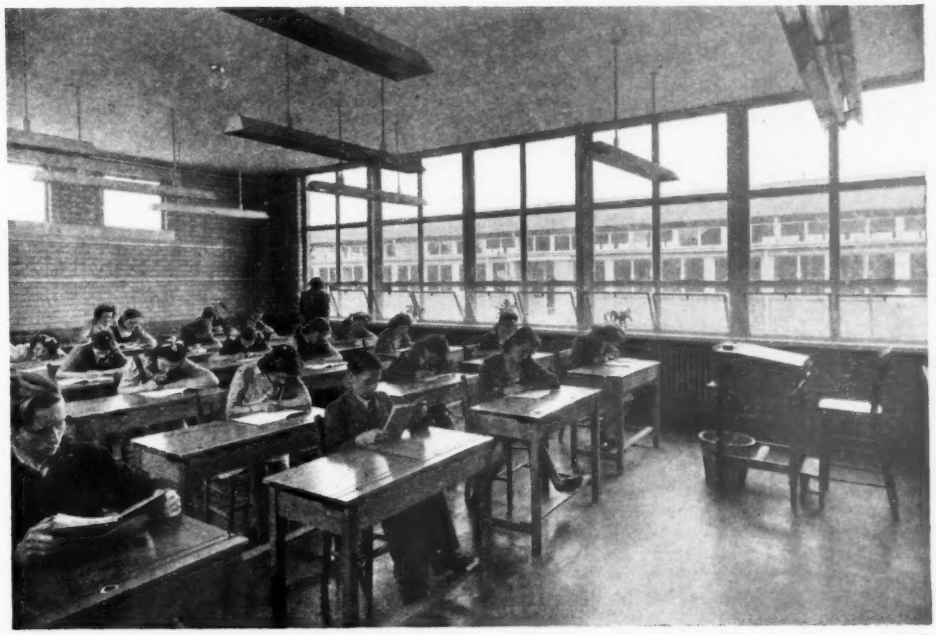
The system gives rapid building. The work at St. Audrey's took just over 20 weeks; the other schools will be ready for occupation in about six months, after commencement of work, including site work which was not required at St. Audrey's. Another feature of the construction is that much of the labour (e.g., steelwork erectors) and materials are not needed for housing. For instance, St. Audrey's school used just over two standards of timber, approximately the amount allowed to-day for a single house.

When the steelwork is erected and the roof covered, a central permanent catwalk is fixed at truss level; this has been found to save a considerable amount of scaffolding. The corridors are roofed with inverted steel tees into which are dropped 2 in. thick wood-wool slabs. These are covered with $1\frac{1}{2}$ in. of concrete, reinforced with a fine steel mesh and surfaced with asphalt and a white spar trowelled in. The outer walls are 11 in. cavity and the inner $4\frac{1}{2}$ in. Flint bricks were used at St. Audrey's, terra-cotta colour for external facing and cream for internal facing with dadoes of the terra-cotta brick. The ceilings are of fibre-

Above: the main corridor at St. Audrey's school is decorated with mural paintings by Mr. E. J. Thring, A.R.C.A., depicting historic Hatfield. It is used as a foyer to the assembly hall. Right: a typical lavatory unit.

Bottom right: the w.c. partitions are prefabricated of sheet steel complete with coat-hooks and toilet-paper holders. Below: corridor to a classroom block at St. Audrey's school. Note the mats at the classroom doors.





A typical classroom showing the cream and brown flint brick walls, the fibre-board ceilings and fluorescent lighting.

board fixed to the steelwork. At St. Audrey's the gable-ends were of brickwork; at the other two schools they are being faced with R.P.M. sheeting as this is found to save a scaffold lift. The classroom floors are mastic asphalt and the corridors and steps of granolithic.

The new work at St. Audrey's consisted of two classroom bays and a connecting spine of lavatories, cloakrooms and staff-rooms. At the two other schools the whole of the buildings are entirely new, the halls being built of steel stanchions with light welded trusses, infilled with brickwork and a flat concrete roof. Features of St. Audrey's which are being repeated in the other schools are: fluorescent lighting in the classrooms with a special mirror-backed unit for the blackboard; blackboards of three horizontally sliding leaves behind which, on the wall face, are an epidiascope screen in the centre, a cork facing for "pin ups" on the right and another blackboard on the left; each classroom has a matwell outside the door which is found to reduce appreciably the amount of dirt carried in on shoes; the wood-wool ceilings of the corridors act as an acoustic absorbent reducing corridor noise in the classrooms to a satisfactory low level; site-labour is saved as much as possible, examples being the use of

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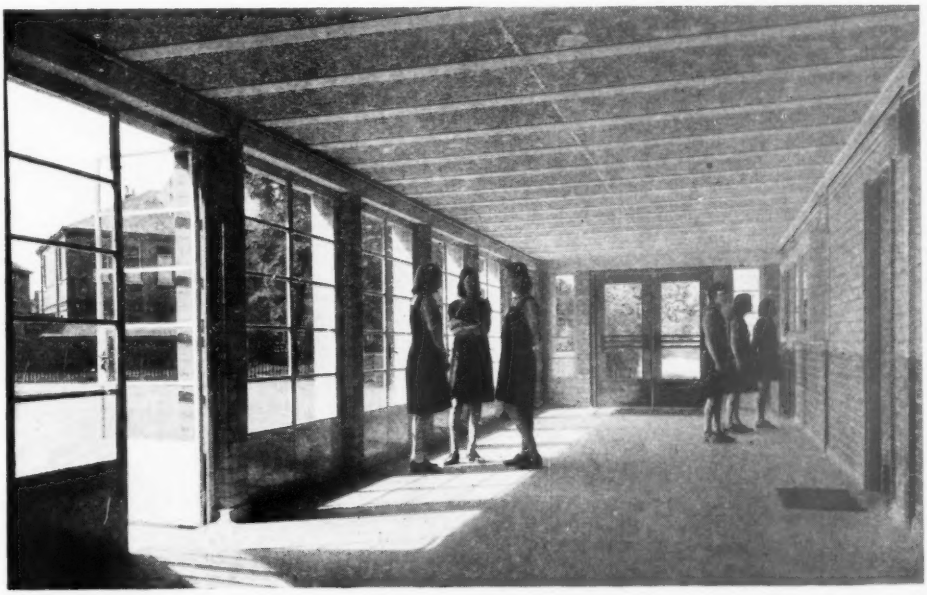
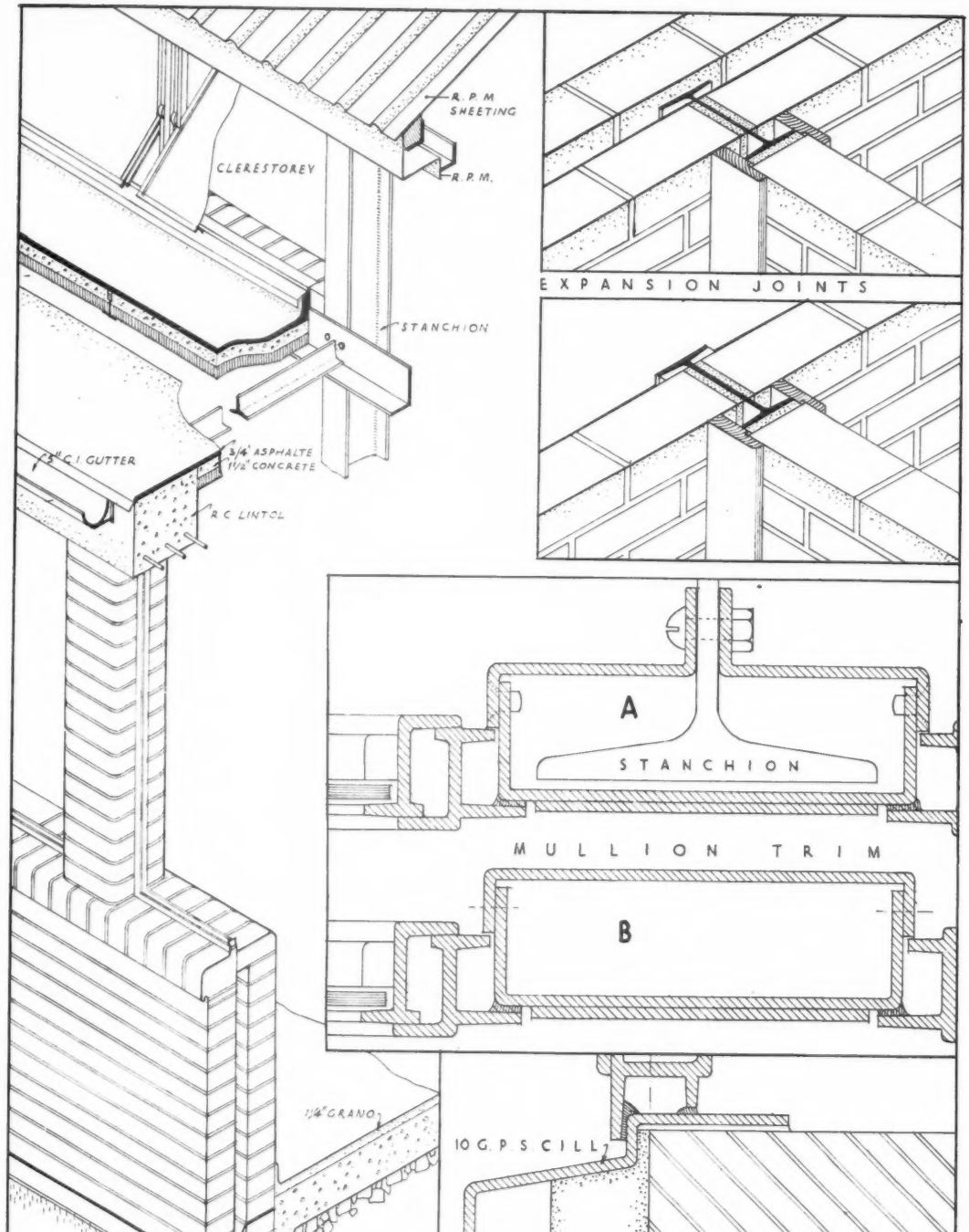
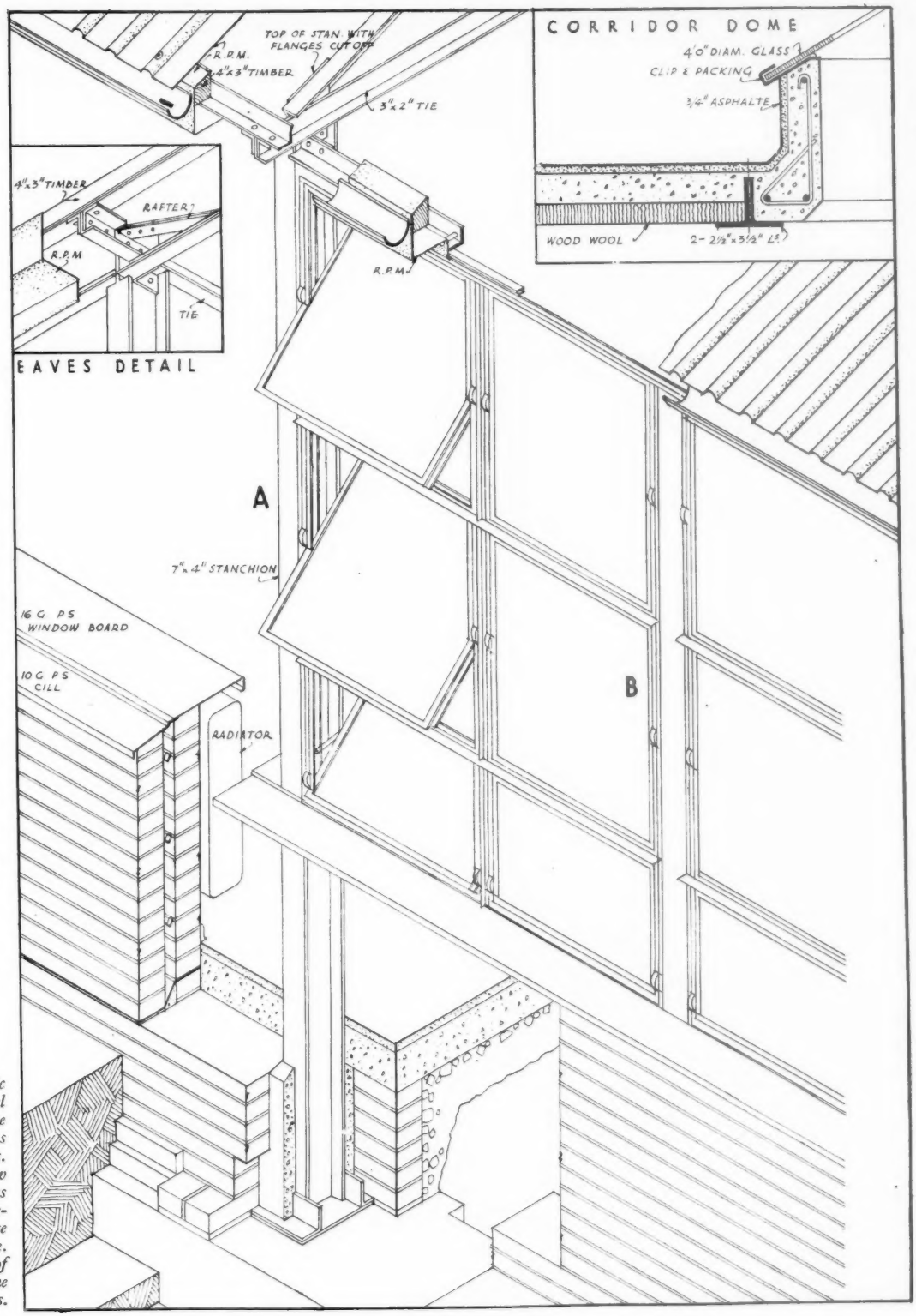


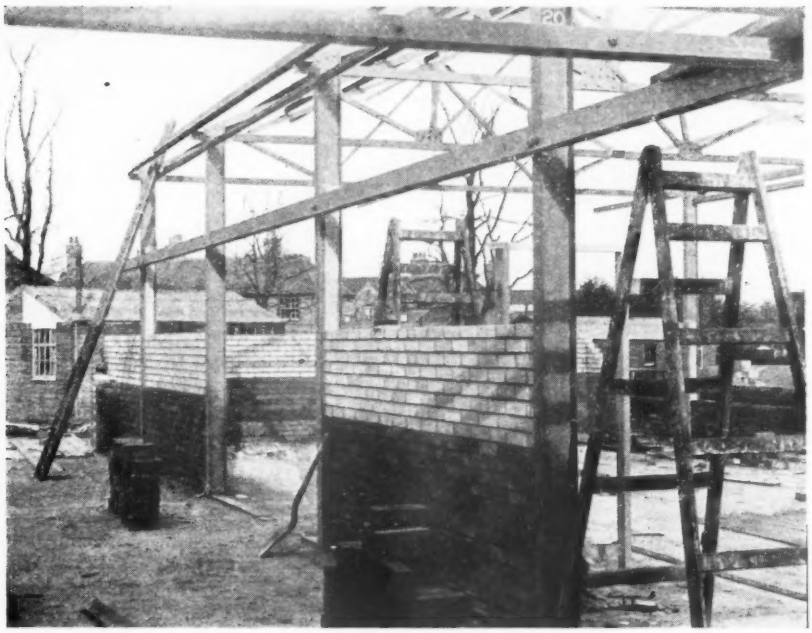
The wood-wool slabs set between steel tees act as an acoustic absorbent and as permanent formwork to the reinforced concrete corridor roofs.



Constructional details. Left: a section showing the main frame and wall construction. Above: the expansion joints are strips of fibre-board. Centre: at A, the mullion trim at stanchions; at B, without stanchions. Below is a detail of the clerestory sill.



Sectional isometric showing the general construction of the steel frame, eaves and foundations. The steel window board also acts as radiator shelf. Details at A and B are on the opposite page. Above, section of kerb to glass dome lights of corridors.

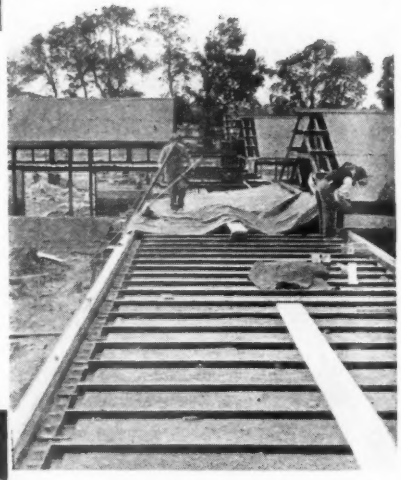


The prefabricated steel frame erected, concrete flooring placed and brickwork started.

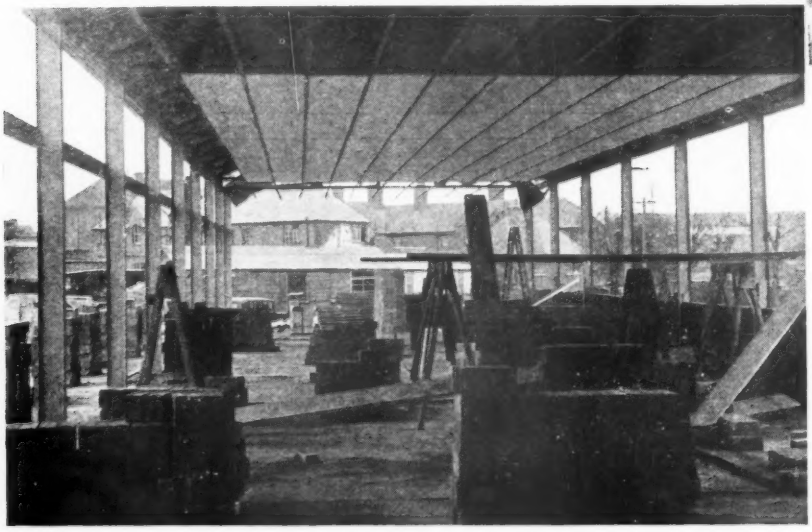
prefabricated lavatory partitions of stove-enamelled sheet steel and sheet steel window boards extended to form radiator shelves ; this last also serves as a guard to prevent children knocking against open hopper lights.

All three schools are heated by low temperature hot water radiators with gas-fired boilers. In this system the gas supply is controlled by a clock and by inside and outside thermostats. The clock switches on the gas at 7.30 a.m. and turns it off at 3 p.m., omitting Saturdays and Sundays. The system was selected after careful comparison of different fuels and the capital costs of the appropriate installations. It was found that the total annual cost of the system selected is only £78 more than one with hand-fired solid fuel, no account being taken of the cost of labour in stoking and ash removal required by the latter. Further, the mess and damage to yard surfaces caused by coke delivery lorries is avoided.

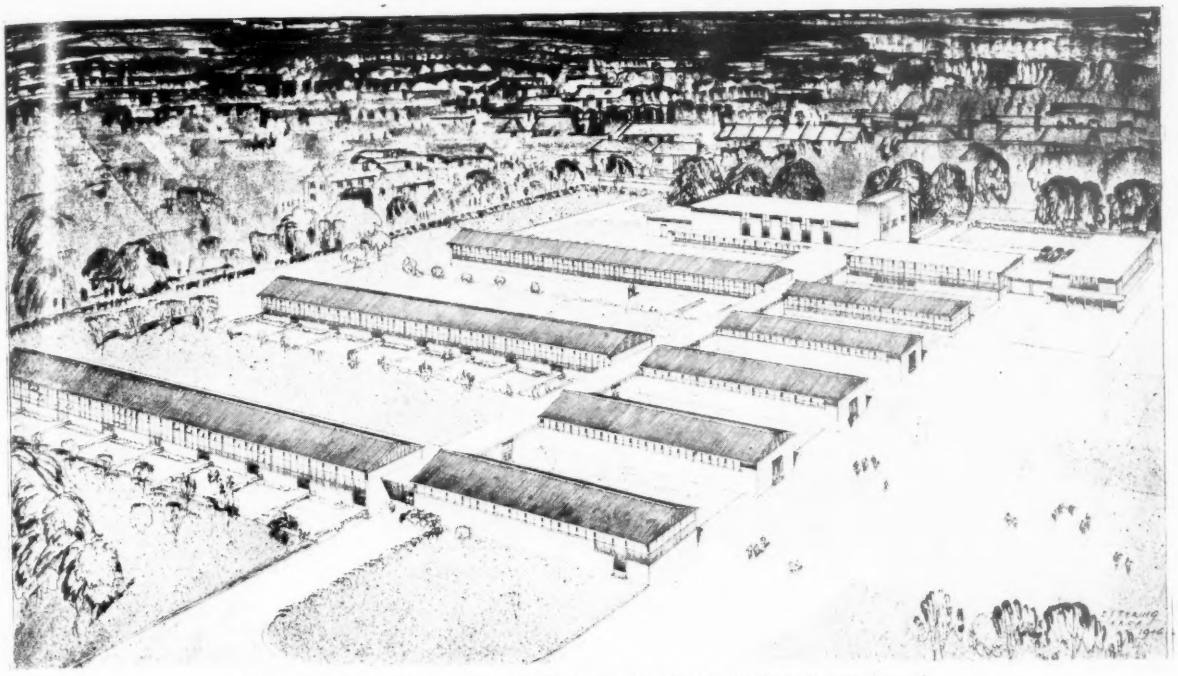
The main corridor at St. Audrey's has been decorated with mural paintings by Mr. E. J. Thring, A.R.C.A. ; these depict the origins and traditional life of Hatfield. The principal assistant architect in charge of the work is Mr. K. W. Douglas, B.Arch. [*A.*], A.N.Z.I.A.



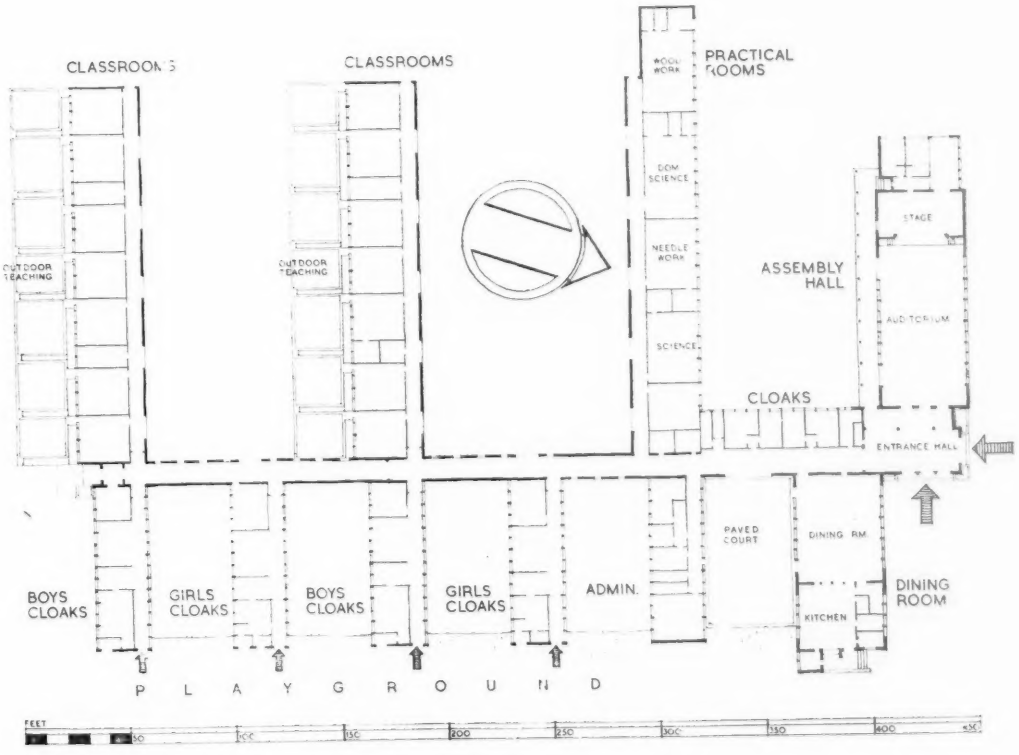
Construction of the corridor roofs ; steel tees, wood-wool slabs, mesh-reinforced concrete and asphalt with trowelled white spar finish.

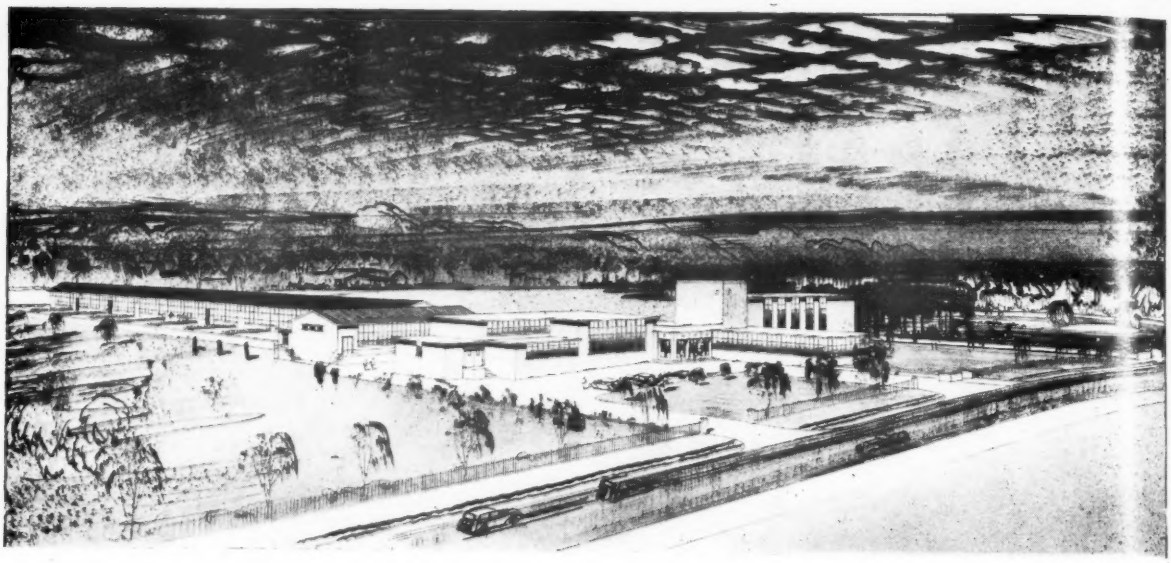


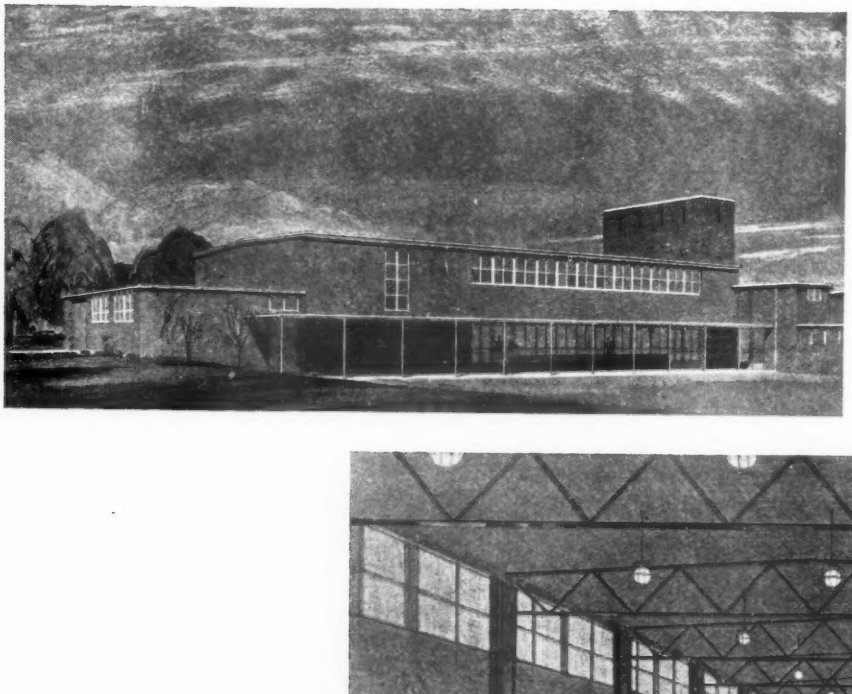
Fixing the wallboard ceiling to the steel roof framing. After the roof is sheeted almost all work proceeds under cover.



Senior school at Southbourne Gardens, South Ruislip, for the Middlesex County Council. The plan is below. The school has 500 places.







Above: the Junior and Infants' school at Field End Road, Eastcote, for the Middlesex County Council. There is accommodation for 400. Left: perspective of the south side of the hall at Southbourne Gardens school. The green rooms are on the left and the tank tower on the right.

Interior of the hall at Southbourne Gardens school. The roof is supported on lightweight welded steel trusses. The stage is fully equipped and the hall is licensed for use by the general public.

FUEL AND THE FUTURE

MINISTRY OF FUEL AND POWER CONFERENCE, 8 TO 10 OCTOBER, 1946

SECTION G—MODERN HEATING AND THE ARCHITECT

The Conference is being held to describe and discuss new developments in the more efficient use of fuel. The architectural section of the Conference has been planned jointly by the Ministry and the Royal Institute of British Architects and will be held at the R.I.B.A. Experts will speak on the most recent research and experience on heating problems, with special reference to housing.

PROGRAMME

OPENING GENERAL SESSION (CENTRAL HALL, WESTMINSTER)

TUESDAY, 8 OCTOBER, 10.30 a.m.

The Minister of Fuel and Power, the RT. HON. EMANUEL SHINWELL, M.P., will open the Conference, and the Minister of Health, the RT. HON. ANEURIN BEVAN, M.P., will speak on the Fuel Requirements of the Housing Programme.

Buffet lunch available at Central Hall.

MEETINGS OF SECTION G (R.I.B.A., 66, PORTLAND PLACE, W.1)

TUESDAY, 8 OCTOBER, 2 p.m.

Chairman: Mr. L. H. KEAY, President, R.I.B.A

2 p.m.: **The Fuel Position and Prospects.**

Speaker: MR. HUGH GAITSKELL, M.P., Parliamentary Secretary, Ministry of Fuel and Power.

Over a third of the coal consumed in Britain is used for domestic purposes, either in the solid form, or as gas or electricity. Mr. Gaitskell will discuss the present and prospective availability of these fuels.

2.30 p.m.: **Domestic Heating Requirements**

Introduction by PROFESSOR SIR ALFRED EGERTON, Sec. R.S., Chairman of the Heating and Ventilation (Reconstruction) Committee of the Building Research Board.

Principal Speaker: SIR REGINALD STRADLING, Hon. A.R.I.B.A., Chief Scientific Adviser, Ministry of Works.

During the past year, two very important documents on the domestic uses of fuel have been published by the Government: *Heating and Ventilation of Buildings* (Post-War Building Studies, No. 19; H.M.S.O., 2s. 6d.) and *Domestic Fuel Policy* (Cmd. 6762; H.M.S.O., 1s.).

The speakers will discuss the technical implications of these as they affect architects.

Tea.

Discussion.

WEDNESDAY, 9 OCTOBER, 9.45 a.m. and 2 p.m.

9.45 a.m.: **New Appliances and Architectural Design**

Chairman: MR. J. H. FORSHAW, M.C., F.R.I.B.A., Chief Architect, Ministry of Health.

MESSRS. J. S. HALES, J. E. WHITE, and J. I. BERNARD will describe new types of domestic heating appliances and systems using solid fuel, gas, and electricity. DR. A. PARKER, Director of Fuel Research, Department of Scientific and Industrial Research, will sum up.

Coffee.

MR. C. C. HANDISYDE, A.R.I.B.A., Senior Scientific Officer, Building Research Station, will open a discussion on the influence of these new developments on architectural design.

1 p.m.: Buffet lunch available at R.I.B.A.

2 p.m.: **Insulation of Buildings—Methods, Costs, and Influence on Design**

Chairman: DR. F. M. LEA, Director, Building Research Station.

Principal Speaker: MR. R. FITZMAURICE, Hon. A.R.I.B.A., Deputy Chief Scientific Adviser, Ministry of Works.

New knowledge of thermal insulating materials will be reviewed in relation to more economical heating services.

Tea.

Discussion.

JOINT MEETINGS OF ALL SECTIONS (CENTRAL HALL, WESTMINSTER)

THURSDAY, 10 OCTOBER, 10 a.m. and 2.15 p.m.

10 a.m.: **District Heating**

Chairman: SIR PATRICK DOLLAN, Chairman, Scottish Regional Fuel Efficiency Committee.

MESSRS. A. STUBBS, S. B. DONKIN, and A. E. MARGOLIS will discuss the Central Station, Heat Distribution, and Continental practice, from the engineering aspect.

Coffee.

PROF. W. G. HOLFORD, A.R.I.B.A., Chief Technical Officer, Ministry of Town and Country Planning, and MR. A. C. PALLOT, M.B.E., Senior Engineer, Ministry of Works, will discuss District Heating in relation to town planning, and as applied to small housing estates. Proposed schemes in the Manchester area will also be described by MESSRS. R. NICHOLAS and E. L. LEEMING.

A general discussion will follow, opened by MR. DONALD V. H. SMITH.

Buffet lunch available at Central Hall.

2.15 p.m.: **Closing Session**

Chairman: THE MINISTER OF FUEL AND POWER.

Representatives of all Sections of the Conference will report on the general conclusions of their respective meetings. MR. HARTLAND THOMAS, F.R.I.B.A., will speak for Section G.

ADMISSION TO THE CONFERENCE

No charge will be made for attendance at the Conference, but accommodation at all meetings will be strictly limited, and admission will be by ticket only. Application for tickets for the meetings described above should be made on the accompanying form, which should be returned as early as possible, and in any case not later than 24 August.

Architects responsible for Local Authority housing design are particularly invited to attend this Section. Sections A to F of the Conference deal with the industrial uses of fuel and power. Section H, "The Home and its Fuel Services," is intended for housing committees and officials, and leaders of women's organisations, who are interested in domestic heating in its less technical aspects. Separate programmes and application forms for these sections of the Conference are available.

All applications and correspondence in connection with the Conference should be addressed to The Director, Fuel Efficiency Branch, Ministry of Fuel and Power, Queen Anne's Chambers, Dean Farrar Street, London, S.W.1, and marked "Conference."

SOCIOLOGY AND ARCHITECTURE

A PAPER PRESENTED BY A.S.B. STUDY GROUP NO. 1 AT A MEETING OF THE R.I.B.A. ARCHITECTURAL SCIENCE BOARD WEDNESDAY 5 JUNE, 1946

RICHARD H. SHEPPARD [*F.*], in the Chair

A. GENERAL—

SOCIOLOGICAL STUDIES AND ARCHITECTURE

This paper summarises much of the work accomplished up to the present by A.S.B. Study Group I (Building Needs). It is the result of a close and well-maintained co-operation among the members; all have made valued contributions to the group discussions, and several have written the statements on particular topics that have formed a basis for this paper. In editing these full liberty has been taken to omit, add, and alter; the result is a composite document which does not commit the group as a whole or any member individually, but is believed to be a fair presentation of the results achieved.

Both significant words in the title must be taken in a broad sense. Sociology means the general science of human society, and includes the study of all types of human organisation, in relation to their activities and their environment. Even the human aspects of economics are not excluded. Architecture for our purpose includes construction, planning and design of buildings and their surroundings, individually and in groups of any size up to the city.

At first hearing this interpretation of architecture may seem unjustified: it may be thought that the distinction between building and planning should be preserved, in view of the obvious distinction between, say, building a house and planning a city. To a sociologist, however, this distinction seems superficial; the simple, individual, or unique character and existence of the individual house is fallacious—it is in reality an element in a widespread web of development, the rest of which may not be obvious in its vicinity. Planning is concerned with this web of development and attempts to bring it to light, to give it an obvious construction, to use it consciously. To lay emphasis, however, on that type of activity, the word planning will occasionally be used in what follows.

Architects receiving their first introduction to sociology must be aware of a primary, the easily formulated, difficulty. Sociology is a study with a considerable history, in the course of which (like other established studies or sciences) it has developed a language and a fixed framework of ideas, which non-sociologists cannot be expected to understand without some close attention. Fortunately, the main sociological concepts used in this paper have already gained wide currency and can be expressed in terms already known outside the sociological profession.

Sociologists are accustomed to organise their science in sections, many of which are already well defined and developed. Thus Population Studies, the Study of Social Institutions, Social Ecology, and Social Pathology have, in varying degree, gained acceptance as their bearing on practical problems has become apparent. Not all sections of sociology, however, are of value to the architect: they are mentioned here as indications of the wide field covered by the study, and also to suggest that less familiar terms (*e.g.*, Social Ecology in the title of a book) may indicate materials that the architect should not neglect.

Both architect and sociologist are concerned with social groups, associations, and communities of all kinds and sizes, from the family to the city and nation; the sociologist studies, trying to number, to analyse, to generalise, to interpret; the architect constructs, trying to provide shelter, with frameworks and apparatus for activities, and symbols for inspiration. Sociologists can help architects in their common concern by (i) supplying in statistical and other forms many tested facts that bear on their task; (ii) showing the relations between such facts and providing generalisations and interpretations that summarise these conveniently. Let us give some consideration to these two general topics.

(i) *Statistics.* It is important that architects should have a general knowledge of the statistical material now available, which is more varied and larger in quantity than is generally known. For many types of building and planning local statistics are the important source; a few examples from these are given here; the value of statistics covering wider regions or the whole country must also be kept in mind.

All housing projects and schemes for institutional provision should be based on known figures and reasoned forecasts from these. For industrial planning, figures of employed persons and of occupations are indispensable, as are those of juveniles entering employment. Old people's housing requires estimates of the aged likely to require it; and all provisions for disability, physical or mental, implies a knowledge of the numbers involved. The bearing of the census of road traffic and of figures of motor accidents on road and traffic planning is generally admitted. The fresh figures obtained under war-time controls, *e.g.*, number of shops of various kinds, provide much fresh material for use in the planning and replanning of distribution.

It should, however, be noted that in many respects our statistics are deficient; it is an all too common experience that exact statistical information is not available on matters where its absence is crippling. And any social provision made on a sound statistical basis will often itself operate so as to render that basis useless for the future.

Many architects are already aware of the importance of social statistics; the inclusion of elementary social statistics in the training for the town planning qualification is evidence of this awareness. There may, however, be a tendency among architects to think of social statistics as one special and limited department of sociology to which it would be appropriate for them to give special attention. This, however, is a misunderstanding. It is true that in certain sections of sociology (*e.g.* population studies) the use of statistics may be more important or more fundamental than it is in, say, racial theory or the theory of social development. But there is no section of sociology for which the use of statistics is inappropriate, and in many, where their use in the past has been less familiar, they are now gaining increased importance. It is, therefore, best to look on statistics as a method of dealing with an infinite number facts of various types within the sociological field, and to see them in their relation to other methods rather than as an entirely separate and distinct way of approach.

The point can be made clearer by considering population studies. Up till quite recently, when forecasts of population changes were being made for either larger or smaller units, it was customary to study the changes that had occurred in the past, either from the time when statistics were first regularly collected, or from some convenient later date, and having thus ascertained the general trend of population change, to assume that future developments of population would be on similar lines. Striking examples can be given of predictions of regular population growth in certain areas made less than a generation ago which have

now been proved completely unsound, although based quite reasonably upon the previous trend of events.

Recently experts have tended to take the more radical view that nothing useful can be said about the future population of an area without taking into account the main factors that produce growth or decline. Not only the so-called "natural" factors (birth rates and death rates) must be considered, but the growth and decay of industries and other occupations, with the opportunities for employment offered by these. It is possible that in future opportunities for leisure-time activities will have an increased influence upon population changes. All this indicates a switch-over from the use of statistics separately to their use in close conjunction with other methods of collecting and ordering relevant information; and such methods will certainly develop farther.

(ii) *Generalisations and Interpretations.* Space will permit only a positive unreasoned statement under this heading. The sociological generalisations—they might almost be called axioms of sociology—that will chiefly interest architects are :—

(*a*) Human communities or societies are organic wholes; in them every member and every limited group is related in some way to every other.

(*b*) The material culture of a community—the fabric of city, town, village or countryside, with all the varied apparatus of living—is intimately related to—is indeed a part of—the community regarded as an organic whole.

(*c*) In human communities or societies change, development, or evolution is continuous; it affects, sooner or later, every member and every limited group. It seems certain that in many respects the pace and range of change is now more rapid than ever before in human history.

(*d*) This process of change or evolution is perceived as a phalanx of related social trends. The social trends of the present are the last of a continuous succession through whose operation the fabric of our cities and countryside and the framework of our lives has been built up. Thus every past development in architecture is the result of a past social trend.

In the rest of this paper we are concerned with the bearing of sociology on a selection of topics of some current interest to architects; the selection may be arbitrary, and there are certainly many others that would have repaid study. It will appear that sociology throws much light on these topics: it will also be evident that it offers no easy way of solving technical or human problems. One general benefit it undoubtedly confers: the problems of the architect *look* different when treated sociologically. They are not less difficult; they take their place, however, in a scheme that has some order, some sequence, some rationality; objectives can be more clearly seen, methods better adjusted, failures understood.

B. EVOLUTION—

1. Social Trends

The architect who looks to sociology for systematic information about current social trends in a form handy for his purpose will not find much at disposal. Some examples, however, have been selected here, for the discussion of which common knowledge and experience give a basis; in these, as in many others, some conclusions that have practical importance may be drawn without difficulty.

(*a*) *The Decay and Growth of Social Institutions.* The most obvious architectural example that comes to mind is the transformation of the Revivalist Chapel into the cinema. It appears that in our time new social institutions arise more rapidly and more vigorously than old ones decay. No doubt this is in part due to the spread of education, the increase in leisure time, and the need for fresh provision to meet the social situation thus created.

Private property, however, when expressed in public buildings appears to have very long life. This would argue the case for flexible buildings with alternative uses, or the leaving of vacant sites against future need. The emergence of new forms of social behaviour like mass cinema going, and dancing and sport watching must be recognised and catered for, but some new forms of behaviour may be ephemeral.

(*b*) *Change in Patterns of Distribution.* The change which came over shopping in the inter-war period is an interesting example which might be followed up. The use of the telephone in ordering and wide ranging delivery of orders are two features. The purchase of necessities is now accompanied by what is in effect large-scale social entertainment in which the qualities of the exhibition, the café and the cabaret are combined with the simple act of obtaining necessary food, clothing and equipment. The store now becomes a palace of entertainment. More generally, the increased stability of incomes in the lower grades has made for greater interest in the process of shopping as well as larger spending power.

(*c*) *Changes in the Pattern of Government and Social Services.* Two conflicting trends may be observed; centralisation demanding ultimately architectural transformation of the capital and regional sub-capitals; and de-centralisation involving the provision of minor administrative buildings in the fabric of new urban growth everywhere.

(*d*) *Mobility.* The increase of mobility increases enormously the demand for the special services of pleasure resorts, makes possible certain aspects of centralisation, and therefore the provision of central institutions serving only a small proportion of the population of any one place. These points are dealt with in a later section under *Transport and Density.*

(*e*) *Family Size, Structure and Sentiment.* Changes in family size and structure may affect considerably the demand for houses of different sizes and different designs. Similarly, the number and types of houses available in turn affect the structure and size of households. This may be illustrated from two social surveys, one made in urban Scotland and the other in Middlesbrough. In the former case the housing is almost entirely of the tenement type and the housing scarcity is very considerable, while in the latter the housing scarcity is much less and the houses are almost all the cottage type. In Middlesbrough it was found that only about 8 per cent. of the households were of four or more persons, whereas in urban Scotland the proportion was more than 30 per cent.

Changes in family sentiment may also have their effect. Thus the idea of providing separated housing of a special type for aged persons has arisen. Patterns of dwelling designs may also affect social habits and create the demand for new institutions; thus the inter-war flat with its minute kitchen may have helped to create the demand for restaurants. The great attention now being given to the post-war kitchen may have the reverse effect. At the same time eating out is a social habit which has been given great impetus by the war and rationing, and by the increasing distance between home and work-place, which makes impossible the return for the mid-day meal.

(*f*) *Changes in the Size and Structure in Industrial Units.* The size of industrial units will obviously affect the size of residential units which serve them, the pattern of their labour force will affect the broad social patterns of family life and these may affect the demand for houses of different types, institutions of different patterns, and communities of different design. The same is obviously true in agriculture.

(*g*) *The Garden City.* This is perhaps the chief outcome of a trend that has its origin in several different sources. If we wished we might trace it to Rousseau (or farther back), followed by the Romantics of the early nineteenth century: these were thinking of an individual return to the country or to nature. We should also have to take account of the development of the concept of the garden, tracing this through the great Renaissance gardeners, for whom a garden was architectural, to those who initiated the less formal English garden; and looking also at the growth of public gardens and open spaces, and the survival of the older

English cottage and cottage garden. The development of open-air sports and their spread to larger sections of the population, would be relevant, as would the vogue of fresh air for health and healing. The growth of an *intelligentsia* would have a bearing, and the development of philanthropy. The synthesis of these and other influences in the garden city helps to account for its importance and vigour as a social trend of the moment.

Much more could be added; it is sufficient, however, to suggest the importance and relevance of the topic. The sociologist has a responsibility to the architect to collect and provide material on changing social trends. At the same time he suggests that the architect should be prepared to accept a dynamic view of human need as one of the elements in his design.

2. Flexibility in Building and Planning

When assured by a sociologist that change or development is a central feature or "law" of the life of societies, and that in future changes may increase in pace and range of effect, the architect may not unreasonably ask for further light. He might recall that he and his fellows had been taught to know the habits of a client, to consider his conscious and unconscious desires, to anticipate his needs; in other words, to build and plan for immediate purposes. He might admit that, from now on, he and his fellows must have *change* constantly in mind. He might ask, "Can we not meet the case by introducing some flexibility into our constructions? so that they may be easily and closely adjusted to the changing needs of those for whom they are built?" And he might go on to explain that, while the technical problems involved are in many cases of extreme difficulty, he would put all he knows into finding the solution, if the sociologist for his part would provide a sufficiently detailed account of the social and economic changes that would certainly occur during, say, the next thirty years.

Point might be given to this challenge by considering a few selected cases that belong to recent history. Schools built before the Hadow reorganisation to accommodate children from 5 to 14 years old are now uneasily adapted to the needs of seniors of 11 to 14 or 15. Maternity wards and hospitals, built when it was still good form for babies to be born at home, are now overcrowded with mothers who can get neither private nurses nor domestic help. Prison buildings remain unsuitable for modern methods of treatment in spite of the most ingenious adaptations. The large family house, quite unsuitable for present-day family size and domestic arrangements, is very hard to divide into convenient flats, or to adjust to other uses. Our whole road system, planned for horse-drawn traffic, has proved itself quite unsuitable, and difficult or impossible to remodel, for fast motor vehicles.

Yet, in addition to such common sense (and hardly sociological) suggestions as building and planning for shorter periods, and using methods of construction that will allow of flexibility in use (*e.g.*, the movable partition), the sociologist cannot offer a simple and satisfactory answer to the architect's challenge. Consider only one important aspect of change: If we were to examine the census records of the distribution of population according to occupations and industries in any country that over a period of years has been expanding its economy and raising the standard of living of its people, we should find a steady shift away from the occupations and industries producing the goods and services likely to be purchased by people with low incomes to those catering for the requirements of people at a somewhat higher income level. Agriculture and other food-producing activities, for example, would become relatively less important, while as more and more people were able to afford services and miscellaneous near-luxuries, a larger proportion of the population would be employed in their production.

It would have been difficult to predict beforehand in detail exactly what changes of this kind would occur. Fashions and expenditure habits are always changing, and adjustments also have to be made to secular changes in the availability of fuel and raw materials. The problems of a planner will be different in a country where coal is the main source of power, but where coal-mines are liable to peter out, from those of a country like S[weden] which can rely on inexhaustible hydro-electric resources. [No] one at present can tell what will be the effects upon the most [ap]propriate geographical distribution of our industrial resources [of] the application of atomic energy to ordinary industry. Never[the]less in broad outline we can tell what the trend of our habits [of] consumption is likely to be, and our planning must be suffi[ciently] flexible to ensure that when the time comes the necessary [ad]justments can be made without unreasonable delay. For if [they] are not, the general development which we are anxious to fa[cili]tate will be gravely hampered.

The general significance of these facts is, of course, now fairly widely recognised. But many of us are too ready to assume that the ultimately controlling factors can be subjected to such close control as to make it possible now to elaborate a pattern of geographical distribution of our productive resources to which the changing requirements of the next generation can be compulsorily adjusted. The influence of this view is all the more insidious because to a significant extent it is sound. The change in the relative importance of the different sources of industrial power to which we have already referred does in fact extend the range of our freedom to determine the location of some of our industries. In some directions at least we can now think more hopefully than in the past of bringing work to the workers, instead of insisting that reluctant workers must be dragged away from the homes to which they have become accustomed to the places where alone new work can be organised for them. But the very fact that this may now sometimes be possible is itself a powerful reason for not exaggerating its significance. A substantial measure of flexibility and of industrial mobility will always be necessary, if economic development is to proceed smoothly. Our plans in every sphere must be elaborated with this fact constantly in our minds. We must always be careful to ensure that they do not crystallise in such rigid forms as will subsequently stand in the way of the shifts of resources which later will be necessary.

All this is very easy to say, and may even be thought to be commonplace. There is certainly no need to imply that in face of these inevitable changes we must sit powerless to do anything about them. Individual tastes will naturally vary widely, but by and large we can anticipate that, in a society of our type, people at any given income level who find that their real incomes are rising, will before very long wish to buy much the same kind of goods and services as are now customarily bought by those who are already in enjoyment of a slightly higher income level, and this fact offers us some useful guidance, general no doubt but also concrete, in determining the directions in which flexibility in the future is most likely to be needed.

Nevertheless, the essential fact remains that there will always be highly significant limits to the confidence with which we can predict the shape of the economic and industrial structure, say, twenty years hence to which the material structures—the equipment for living—that we are planning to-day will have to be adapted. And we cannot reasonably complain if no one—not even a sociologist—to-day is able to provide us with neat and easy solutions of the difficulties which arise from this fact. Much more fundamental work is needed before we can form a clear picture of the economic and social consequences of the trends to which we have been referring. The "practical" planner can give much valuable assistance in what, if it is to be successful, must be a joint enterprise of enquiry. But he should not complain if in the meantime the sociologist and the economist are often able to do little more than point to the significance of trends, the determination of the full meaning of which is still to a large extent a matter for the future.

3. The Conflict in Taste

In the study of social trends and social change few topics can be of greater interest for the architect than this. He is frequently made aware of it when dealing with individual clients;

he is sometimes frustrated by it when working for business firms, municipal committees, and other public or private bodies.

Why do clients insist upon designs (or elements in design) that are out of date, inharmonious, purely imitative, often unsuitable from the technical angle, and often showing gross lack of grace or beauty? Why the great gulf fixed between "vernacular" taste, i.e., the preferences and predispositions of the multitude, and "educated" taste, i.e., that of the architects and the informed public? Sociology can assign a leading part to two elements in the situation; the time lag in social change, and the persistence in a large national society of distinct and even opposed cultural traditions.

There is always a time lag in the acceptance of social change by the various regional occupational and other groupings and layers in a large society. Ideas penetrate slowly; perhaps most people are impervious to new ideas after age 25; a new generation has to accept them as it grows up. In a society where people have many specialised interests, architecture is itself a specialised interest, and few outside the profession—or sometimes, shall we say, outside a young vigorous group in the profession—can be in touch with the latest developments, even where there is the most obvious technical and æsthetic mandate for them. It may take the period between studentship and positions of professional authority to gain acceptance for a new idea, a new style.

Frequently nowadays the blame for the time-lag is laid on one particular class in society. In this country (and elsewhere) the middle-class, or sometimes, the middle and lower middle class is accused and put in the dock. A sociologist will look on such generalisations and accusations with reserve. It is not difficult in our society to find examples of middle class people who are out of date or tasteless in their ideas and choices in architecture and in other æsthetic fields; and the intuition which connects this lack of taste with acquisitiveness—the accumulation of money and property—seems, in some cases, to be sound. But the whole picture is not simple. Some of the chief supporters of the modern movement in architecture have been wealthy members of the middle class; many members of local councils and corporations who have fought valiantly in the battle for the preservation of ancient beauty, for good taste in new buildings, and for convenience and design in planning have been middle-class people. Many architects and planners have a middle-class background. To which class did Ebenezer Howard belong?

A more positive theory that has some currency to-day is that salvation comes from the working class (to which, in some countries, the peasant class is added): the sons and daughters of the workers, it is said, have an inheritance of "natural taste" or "folk tradition" that will, when their class gets a chance, bring back simplicity and beauty into handicraft, art, and architecture.

The profound truth that underlies this belief—for which the history of culture provides ample confirmation—must not be allowed to conceal its dangers. The working and peasant classes have, in many historic epochs, here and elsewhere, revealed a remarkable power of throwing up gifted individuals fitted to become leaders in technical tasks and in art and handicraft and design. They, and the middle classes, have also produced many workers in these fields who have proved themselves limited in ideas, narrow in outlook and incapable of the synthesis in design that marks the great artist or architect.

The sociologist, therefore, suggests that such easy generalisations should be subjected to the penetrating rays of careful research; in each case family inheritance and traditions, education, professional training and more general social and cultural influences must be examined. This leads us to a discussion of the second element mentioned above—the persistence of distinct and even opposed cultural traditions.

Such opposed traditions developed in Britain in the nineteenth century.

The change-over from a corn economy to a coal economy meant that a rapidly-expanding population had to be housed somehow and anyhow; and the pleasant cottages of an agricultural community, the result of a long and slowly developing tradition of building, gave place to the grim rows of mining shacks which still disfigure our industrial towns and villages.

Things seen in retrospect have a somewhat different appearance to the same things viewed in the immediate present. To those early "coal" communities the back-to-back houses with middens, the urban equivalent of the agricultural cottage, must have appeared as a great improvement on the improvised hutting which housed so many of the pioneers of industry. Similarly the bye-law houses, in long unlovely rows with adequate sanitation, were a welcome development from the "back-to-backs." But the dominating, indeed the inescapable urge was the need for speed, and under the pressure of this urge all grace and beauty, the result of content and contemplation, had to give way to the immediacy of the purely utilitarian. Thus in a land which has produced some of the most beautiful housing in the world there grew up a *tradition* of bad and ugly building (that is bad in the social sense—though many of the structures have survived for over 100 years). Now whilst all this was happening in one sphere of building—what were the architects, and the educated public who followed their lead, doing by way of a corrective?

It has been said that the "Gothic Revival," the most important architectural development of the nineteenth century, was the direct result of the Tractarian movement. If we accept this hypothesis, with possible reservation, then it is of some importance to understand what the Tractarians stood for. In effect Newman and his followers said: "We do not like your ugly modern world which you are so complacently building, and we will have none of it; we will seek salvation in the tried and approved, in the authority of established traditions."

We all know the subsequent history of the Gothic Revival, its emotional success and its practical failure; and the successive revivals that followed with bewildering frequency. The present mood amongst architects and others is to regard these revivals as a mistake; but they were of immense importance, in the safeguarding and transmitting of a great deal that is precious in the English heritage. The revivalists did in effect (and this is their weakness) turn their backs on the problems of their immediate present and live in a past of their own re-creation. Thus we see the English way of life and the English way of building split into two diverse paths which grew wider and wider apart.

At this stage of development there was no conflict—only avoidance—the conflict was to come later.

As the industrial type of society developed, there arose on the foundation of the new wealth created a new executive and directive class, extending from the foremen and lower-paid clerical grades to the Managers and Directors. But they were all of the same origin: they were all *miners* and not *peasants* with a tradition of bad taste in building; and though at the higher level the wealthier of the "miners" were absorbed into the social system of what has been described as our "Ruling Class" *via* the Public School and the University, the vast majority of this new aspiring executive class were very little influenced by "Tractarian" Culture. What culture they had was urban—an urbanian cradled and nurtured in the industrial towns, providing no basis for architectural development. Even now many architects do not understand that in such a situation a purely abstract solution of the *impasse* may be a very good architectural solution but a very inadequate sociological solution—and therefore no solution at all.

An eighteenth-century house or Tudor cottage may have a greater content of architectural beauty than a "Tudor-bethan villa" but they are not the symbols easily accepted by those reared on industrial standards and used to the industrial way of life. It must be remembered that since the repeal of the Corn Laws agriculture, until recent days, has been relegated to a

subordinate position as compared with industry. Thus it was seen that the new class—the aspiring industrial executive—was the successful class, and the detached and semi-detached villa, the result of an unhappy mating of utility and sentiment, became the symbol of liberation and success, whilst the rural cottage tended to express the symbol of "serfdom" and failure.

A moment or two may be spared to consider how far these two elements will continue to operate in the future.

Is the time-lag decreasing or disappearing? Is it due to conditions that are now passing away? With the growth of modern means of communication and transport, is it possible that, in a few generations, we may get rid of the time lag; *e.g.*, that the inhabitants of the Fiji and Falkland Islands will be as fully conscious of new developments in architecture and as ready to adopt them as those of London, Paris or Chicago? At least we shall approach nearer to such a state; and certainly it is attractive, in some respects, to dream of a world society that is completely up-to-date everywhere. Account, however, must also be taken of the deep-seated desire for *difference*—for distinction that is widespread in human groups and their individual members; and the perennial need of symbols to satisfy this. Differences due to geography and history might thus give place to chosen symbolic differences; in an "up-to-date" world society Freemasons' lodges might insist on having Egyptian façades for their buildings, wherever found. The tendency is already widely apparent in the large-scale societies of to-day.

Will the conflict of cultures continue in our buildings in this country? In this respect, the present period, this post-war period of building, is very exciting. For the first time architects and others are beginning to see that we cannot solve our problems by turning away from the present, and at the same time that a purely utilitarian solution, even a scientific utilitarianism, is not enough. What we require is the grace of the past with the convenience of the present.

It is interesting and significant that so many of our recent exhibitions dealing with Reconstruction and Planning, including the last one at the R.I.B.A.—"*Building now*"—appear to place as much emphasis on the social as on the abstract architectural aspects of building; this points in the right direction. Further, the universal introduction of new materials and techniques—developed and used by architects, engineers, and other technicians—may provide the basis for a new and vital development in design and symbolism that will fuse the hitherto conflicting traditions.

4. "Existence Minimum Standards"

At times like the present, when there is an urgent call for building of dwelling houses on the largest scale, the suggestion arises (perhaps inevitably) that, to meet the emergency, houses that will just reach the minimum needs of existence should be provided at great speed, leaving till later the more leisurely building of houses that provide for a full life—easier, more spacious, more social, more cultured.

To a sociologist this is of great interest. Comparing one civilisation with another and past with present, he sees that, for many peoples to-day and at earlier stages in our own history, the accommodation now provided as "existence minimum" would have seemed generous or even princely. He can call to mind the not too distant periods when, in rural Scotland, in the mountains of Wales and on the frontier in North America, turf houses, huts of unmortared stone and log cabins were the homes of healthy and prolific families, whose members led lives of significance to their neighbourhoods and sometimes in wider fields. With this in mind, it might be thought that he would give approval to a proposal which, in some respects, suggests a return to simpler conditions.

On the contrary, however, the sociologist is inclined—both *a priori* and as a result of accumulated experience and knowledge—to foretell disaster for these attempts. Hastily erected "existence minimum" buildings, placed on sites that happen to be readily available (quite apart from the technical defects that they sometimes show) raise a crop of fresh and difficult social problems. Workers find transport to work slow and costly; mothers of families must make daily excursions to far distant shops; young people have no handy means of outdoor or indoor recreation; school accommodation for children is distant or crowded or absent.

The fact that all these and other problems have been encountered on permanent new housing estates, where planning was defective, strengthens rather than weakens the argument.

The sociological interpretation is clear: the scheme is a belated attempt to return to the conditions of a simpler state of society people who have attained a different stage of development and are already reaching out still further into the future. Taking only one element in the simpler situation—housing—it forgets, or neglects, all the other elements through which provision was made for open-air activity, leisure-time recreation and simple forms of social life. But the people for whom the existence minimum housing is intended require a more complex, fully planned and co-ordinated provision above rather than below the standard to which they have formerly been accustomed. To make "existence minimum" buildings satisfactory, would involve training the households concerned to forget many of their firmly-fixed ideas and habits and to assume again those of an earlier and simpler stage, and re-establishing the simpler conditions to which the old habits and ideas were appropriate. No reputable sociologist would foretell success for such an effort, or would advise it being contemplated. The positive conclusion is that an "existence minimum" standard for to-day is different from a practicable and reasonable economic standard representing a good investment of materials and labour, and worthy of the coming generations, only in space provided and arrangement; the social essentials are little if at all different.

Once this is established there are clearly great advantages in the recognition of an "existence minimum" standard for housing that takes full account of all the human needs of a society at our present stage of development. It would, *e.g.*, be possible to work out a fair margin between such a standard and an upper limit for a particular task; this would allow the architect opportunity for the exercise of individual skill in achieving a satisfactory overall effect. This seems especially true in public housing where the tendency has been to adhere rigidly to the standard (even a good standard) and produce monotonous and uninspired dwellings and communities. Perhaps there is now more obviously an upper limit to the margin since every unnecessary area and space, however pleasing, is an additional responsibility either on the individual householder or on the community faced with probable continuing shortage of manpower.

It would be convenient for the architect if some simple unit of space, sheltered or unsheltered, *per capita* could be used as a design basis. Such a unit as 3 to 5 square meters *per capita* of shelter as a minimum requirement with certain qualifying conditions, such as adequate sanitary, heat, light and ventilation facilities, segregation of family units and sexes, has been considered by groups attempting to develop reconstruction policies under military government. It is conceivable that such overall minimum space standard could include all essential shelter items in the community. Generally, the school, hospital, shopping, recreation, and administrative space, when reduced to a *per capita* basis, is quite small in comparison with the domestic shelter requirements of the individual. If such a target figure could be developed, the planners' problem would be one of proportioning the unit space to meet the several needs of the individuals and communities. It is conceivable that the busy housewife would readily forfeit a few square feet of perhaps not too essential hall space if, in the aggregate, there could be provided within a short distance a nursery or foul-weather playroom for her own and neighbours' children; or that part of a garage or basement could well be sacrificed for an adequate hobby workshop. One can hardly determine existence minima or a sound working

standard without consideration of all the space facilities that provide for or shelter human needs or activities in the community, since providing a space in some other part of a community may be more economical and satisfactory than the same space in the dwelling unit.

Unfortunately, such minimum requirements, however desirable, are by no means established or recognised, though some of the factors that affect them can be discussed. Time is one element which can hardly be disregarded. A nine square foot telephone booth is adequate shelter for a brief phone call. An 18 or 20 square foot railway sleeping berth and a somewhat larger state-room on board ship suffice for brief periods of days, and the space required for family shelter for a few months or even a year is significantly less than it would be wise to provide for long-term housing. Discipline among the occupants has a great effect on the adequacy of space. Many will recall the confusion and annoyance of the barracks to the raw recruits; yet, given a few months' training for the men, these afforded orderly and reasonably comfortable housing, though providing only approximately 48 square feet per head.

Many flat dwellers in communities where there is experience with such dwellings seem to get along quite comfortably in space that appears cramped, awkward and annoying to those not accustomed to dense urban life. There may even be a trend toward reduced space requirements as efficiency in use of space and discipline among occupants improves. Climate and recreation and other habitual activities of the community also influence space requirements.

While there is little experience in empirical determination of an absolute existence minimum for the domestic shelter, except perhaps in concentration camps (and here an extended duration of existence would appear hardly desirable) there has been experience in the U.S.A. during the war in housing families at minimum cost of materials and man-power, but at such a level as to maintain a high productive capacity, to which a good community atmosphere was essential.

Although they were called "stop-gap" housing, and were never considered other than an emergency measure, trailer communities (caravans) provided quite satisfactory domestic shelter and developed an apparently satisfactory social life when all required facilities were planned and conveniently provided. The trailer itself provided usually about 140 square feet of housing and more often than not housed two adults and a child; some larger units housed as many as four adults. In addition, a utility unit provided toilet, bathing and laundry facilities for about 25 families with a space allowance of roughly 20 square feet per family. School capacity had to be adequate to provide for six-tenths of a child of school age per family, and community buildings for recreation assembly, first aid rooms, nursery, administration, and so on, were provided at less than 20 square feet per family. The shopping facilities provided were related to the other facilities available in the community and frequently serviced a considerable population other than the trailer village, so it is hard to say whether these were in excess of the minimum needed; in general they were about 5 or 10 square feet per head.

Many of these trailer communities were quite large, i.e., over 2,000 families, and also large in proportion to the population in surrounding areas; consequently they were little influenced by other than internal social activities. Many of them were in operation for well over two years, and parts of them have operated over longer periods. With regard to the social effects, in so far as observation is able to reveal these in a short period, it would seem that there were no evidences of damage to the occupants. Perhaps because of restricted facilities at home the community spaces and community activities were more intensely enjoyed than in normal housing developments. Perhaps because of the constant meeting at the utility building, neighbourliness seemed well developed. Noticeable friction or management problems did not seem greater than in other housing experience. The closing down of trailer villages was generally difficult as most of the inhabitants for one reason or another were loath to leave.

While the space in the trailer communities provided considerably more than a mere existence minimum, it is none the less well below the space desired for a permanent housing programme contemplating long-term occupancy. This experience does seem to show, however, that very much less space is required than is normally considered even a minimum standard when this space is so arranged as to be efficiently used and to provide for the social needs of the occupants. This suggests the development of standards in more detail and covering all the needs and activities of a community but without specific limitations as to the space to be provided in the dwelling unit; more flexibility of treatment by the architect would thus be possible.

On the pressing current problem of the correct policy to adopt in a housing crisis sociology can scarcely go further than the suggestions and warnings above outlined. The question whether we should adopt a standard nearer the existence minimum with the two purposes, first of meeting the emergency quickly and reducing the social damage to the thousands that must lack adequate shelter and suffer the evils of overcrowding, and secondly of conserving the maximum of productive capacity to put behind a long-time programme of improving housing standards, seems in the main a practical one. Administrators must weigh the amount of social damage done by the lack of housing during the longer period required to produce housing of an acceptable modern standard against the social damage done over the shorter period required to produce existence minimum standard shelter.

Since the basic purpose is to raise the standard of living (presumably the average standard of living) it would seem that the production of large quantities of lower standard housing would accomplish this end better than the production of smaller quantities of higher standard housing, since the great bulk of the people who will occupy the lower standard housing are now in even worse accommodation and contributing to overcrowding.

Unfortunately experience in Britain and the United States shows that there has not yet been noticeable any important difference in the period of time required to produce the lower standard housing. Again, on account of political considerations it has been convenient to design the temporary house so elaborately that both in cost and in time it has shown a meagre advantage over the durable house at a somewhat higher standard, and in addition created a later problem of replacement.

On this replacement the sociologist can suggest that, if stable community life is desired, permanent houses should be built on, or very near to, the temporary house sites, and that permanent should replace temporary social provision with the least possible change of location—scope being provided, of course, for using the results of experience. The communities temporarily housed would thus repeat, within a few years, the historic experience of older communities whose material fabric has been reconstructed many times during the centuries without affecting the continuity of their existence.

C. COMMUNITY PROBLEMS—

It is often suggested that there is an intimate connection between community life and architecture; it is said that "Architecture is an expression" (or even "*the* expression") "of community life"; and from this by an easy transition comes the idea that good architecture accompanies and expresses a community life that is in some sense good; bad architecture indicates a "bad" community life. With this is often linked the conception of "great ages" in architecture. Everyone knows the emphasis laid on these ideas by the mediævalists of the nineteenth century, in their praises of Gothic building; and their views are by no means without influence now. In his recently published book on Georgian architecture, Mr. John Summerson has given a charming and convincing picture of the homogeneity of architecture, internal decoration, furnishing, and society life in his period. To-day we are told that the successful modern architectures

of Switzerland and Sweden are the expression of, or are made possible by, the truly democratic way of life in these countries.

No one need cavil over the concept of " great ages " in architecture ; nor need there be any question that in these ages there was a large measure of social or " community " support for the architect. He was expressing—in the structure, style and ornament of his buildings—something that roused widespread sympathy, and responded to a widespread need. There was, shall we say, a *synergy* between architect, client, and a large body of people who agreed in their ideas and tastes, and lived a social life to which the architect's work was well tuned.

To the sociologist, however, the problem is not to be defined simply in terms of " great ages " or any limited periods. Architecture and its allied arts and crafts cannot be out of relation to the society or community of its time and place ; but that relation may take very varied patterns, each of which is worthy of study. " Good " and " bad " are too simple as categories for sociological description ; even the bad Victorian architecture often has value as a cogent unblushing expression of the spirit and ideas of Victorian man. Taking this into account, however, the sociologist will be inclined to agree that successful architecture is in general associated with some unity, some common purpose or body of ideas, some socially expressed urge, or drive, or trend, in a human group or community ; but success may be at different levels.

In recent years, however, this sound sociological view has given rise to a good deal of confused thinking which has had, and may still have, too much influence on the work of architects and planners. The amorphous growth and social disintegration of modern urban units have drawn attention to the marked contrast between these, in their outward aspect, and surviving examples of building and planning that embodied and expressed an active community life. Neglecting—or in ignorance of—the complex social situation in which such community life and " community " architecture developed, many good people seem to have reasoned : " Community life must be renewed ; let the architect and planner renew it for us by providing an appropriate shell or setting."

Objection at once arises on general grounds. If we agree that in the " great ages " architecture and social life formed a unity, we must also agree that each reinforced the other, but we have no conclusive evidence that either created the other. Inner and outer life worked together in harmony : material culture and social life achieved an almost perfect fit. Such a unity cannot be artificially constructed. No doubt the architect, the administrator, the captain of industry, the social worker, can help or hinder ; essentially, however, it is something that happens, like Kipling's ship that found herself.

It may be more effective, however, to examine one or two present day problems of community life in detail. Those selected here are *Transport and Density* and *The Neighbourhood Unit*.

1. Transport and Density

A major issue in town planning is that between spaciousness and accessibility. Seemingly, these two desiderata are incompatible, for spaciousness, i.e., low density of building, means that a larger area than would be required for compact building is taken up by the same number of houses. Under open development, a few thousand houses are the limit for accessibility by walking.

We find, therefore, on the one hand that substantial, well-provided old towns, affording good accessibility to their inhabitants, are compactly built, and on the other hand that sparsely populated, spacious towns lack the facilities that can be provided only for a great number of people.

However, modern transport has made it possible for the population of a big town or conurbation to be housed at low density, spread over a wide area, and yet to partake in the opportunities provided at the centre. The inhabitants of outlying small towns and villages, too, make regular shopping and amusement expeditions to centres of better provision, many commuters travel to work, and some of the children travel daily to school. Mechanised transport has thus come as a liberator both from the congestion of the cities and from the paucity of opportunity for those living in outlying localities. We may suggest that the size of the community has grown larger.

But the reliance on accessibility by transport can be carried to excess—inhabitants of inter-war housing estates had to travel to school, to work, to do everyday shopping, even to the pub. Accessibility by bus or train is sufficient for some, but inadequate for other matters. In other words, accessibility must not be measured by the same yardstick for all purposes. We may distinguish three accessibility rings, as it were, of different radii : and not bare accessibility, but *convenient* accessibility, must be understood :

(1) accessibility by transport—the " Circulation Area " ;

(2) accessibility within walking distance ;

(3) accessibility on tap, in every house.

(*a*) *The Circulation Area.*

Present standards of living depend in many respects upon large-scale organisation and specialisation. Mass production is the most obvious but by no means the only instance. Only a large labour market provides balanced industry, a variety of jobs, and thus the flexibility which is essential for prosperity and security. A varied educational system cannot be established for a population of less than 60,000, nor a full medical service for less than 100,000, while the standards of provision will rise with higher numbers. Theatre and museum, reference library and department store need the support of a large population. The status of a county borough will in future be conferred only where population exceeds 100,000. Only a shopping centre catering for a large population can offer a wide range of choice ; nor can a market cater for a small group of people. The increasing emancipation and differentiation of the individual call for accessibility to a large number of persons from which to choose one's friends and for a great variety of different associations, and benefit by the possibility of rapid and easy adjustment to a type of work that can be chosen from many to suit the individual.

As, therefore, the accessibility to the centre of a large town and various other places is essential for a full life in modern civilisation, it is important that the total time distance from home to these points should be short. Low building density in the residential areas, however, lengthens the walk from the houses to bus stop and railway station and thereby reduces accessibility. This argument does not, of course, hold good in the well-to-do areas where almost everybody has a private car ; it applies, however, to the majority of city dwellers.

(*b*) *Walking-Distance Accessibility*

At the consumer end, some of the facilities whose establishment, organisation and maintenance are the responsibility of a larger town or region or even the nation can be decentralised to smaller localities. It is desirable that such decentralisation should be carried out for the services catering for elementary, not-so-specialised, everyday needs, particularly for the convenience of the less mobile members of the community—young children, their mothers, and invalids. Infant welfare centre, junior school, some shops and the post office, pubs and cinema (which is of a repetitive character), playgrounds and other open space should be within walking distance in every residential area.

It must be kept in mind, however, that on the local level, too, quality and scope of facilities that can be provided increase with the number of people to be served—a population of 20,000 can support much better services than one of 10,000. The number of persons housed within walking distance depends, however, on the density of building. On the assumptions of the Housing Manual, a " neighbourhood " of about 500 acres accommodates 10,000 people at a net residential density of 30 persons per acre,

but over 20,000 at a net density of 100 persons per acre. Higher density, allowing a greater number of persons to be housed within walking distance of the " neighbourhood " centre, leads, therefore, to superior local provision and reduces the need for travelling to a larger centre.

(c) Availability in Individual Homes

Yet another set of services is to be made available on tap in each home, viz., water, gas and electricity. Although hardly any pertinent figures have been published, there can be little doubt that the provision of piped and cabled services (as that of other services like street lighting and delivery of goods) is more expensive for a given number of houses under open development than with compact building. This would certainly be so for a hot water service.

It is interesting to reflect that the supersession of the parish pump by the supply of piped water to each dwelling reduces local community spirit in two ways : (i) the responsibility for the supply no longer rests with the local citizens, and (ii) obtaining water is no longer the occasion for social intercourse but a private affair inside the household. Even more important, the advent of wireless and gramophone makes the family and the individual much more independent of their neighbours in the matter of news, entertainment and stimulation.

As against all these services which are derived from some more central source,* one factor of community life still springs from a local fountain-head, namely, the neighbourliness between the inhabitants of a group of buildings such as a street, a square, a block or blocks of houses or flats. The size, both in numbers and in area, of this group has yet to be investigated. We do not yet know whether and how density affects the growth of neighbourliness (cf. the strong mutual attachment of slum dwellers). Is perhaps the number of those whom a given family regards as its neighbours smaller where density is low, because fewer people live within a radius of, say, quarter of a mile from that family ? Are people who live half a mile away regarded as neighbours ?

There are, of course, other arguments to be heard. Open development encroaches upon the countryside, taking up agricultural land and barring access to the open country to those who live in the more central districts of towns. There is real danger that the contemplated studding of the Home Counties with new towns laid out on an open plan would make it increasingly difficult for Londoners to spend a day in genuine countryside. Again, a strong argument for low density development is based on the assumption that every household desires and will use a private garden. This is certainly not the case : e.g., widows with young children may find a garden too great a burden. Also, it is possible that a *maintained* common garden of area less than the total of private gardens might give more effective garden space. Experiment is required to test this hypothesis.

Further, density of houses is not the only factor making for increased use of transport. Distribution of factories and other work-places, space occupied by these, distances within the factory enclosure or trading estate, design of factories in one or several storeys, location of administrative offices at different points—all these and other factors have to be considered and their influence weighed in studying the current situation.

To sum up, the development of modern transport has made it possible to apply the principle of low density in all new building schemes. However, before adopting such a policy for the sake of spaciousness, the town planner should realise the social costs. Low density of population has to be paid for in a restricted range of opportunities and facilities conveniently accessible on foot ; and correspondingly in increased transport to centres with fuller provision—much in excess of that volume of transport which is an essential part of the organisation of modern life.

*This does not deny that local spirit benefits from the decentralised facilities—learning together, playing together, meeting in shops and pubs and so forth certainly cement local community feeling.

2. The " Neighbourhood Unit "

In many recent statements and reports that carry great weight in the planning world, emphasis is laid upon the " neighbourhood unit " as a basic element in the urban pattern. Such a unit is envisaged as containing 5,000 to 10,000 inhabitants, and is to be as far as possible self-contained in respect of work, leisure, and social provision of all kinds ; and it is to be obviously separated from other units by open space or in some other manner.

Two distinct objectives seem to be in view in the advocacy of this unit. It provides a convenient visual pattern and numerical grouping, and gives a useful measure for the provision of public services and institutions. It also is thought to assist the solution of the modern problem of social disintegration and lack of the sense of community by providing a comparatively small unit in which the individual will inevitably be impelled towards neighbourly attitudes and actions. The first objective seems legitimate and rational ; the second confused and impossible of attainment.

It is argued that many of our chief social evils arise from the break up of an earlier community life, which is envisaged as life in small units, closely integrated, and having a pervading attitude of neighbourliness between individuals within the community. It is stated that many of the housing estates built between the wars showed complete lack of neighbourliness and community sense ; and it had already been supposed that vast badly planned urban areas built before 1914 also completely lacked those. However inaccurate such statements may be, there is in them a core of profound truth, sensed, perhaps, rather than defined scientifically by many thinkers, and requiring serious and continuing effort from sociologists to sort it out. Social integration in some degree is necessary in every operative society ; the greater the degree of social integration, the better, in many respects, will a society carry on and the more satisfied will be its members ; and close integration has often in the past been a feature of the small isolated community. It does not follow, however, that the artificial creation of small isolated communities under present day conditions would of itself develop neighbourliness or other forms of integration.

(*a*) Neighbourliness is strongest where homogeneity is most marked ; but homogeneity requires similarity of, say, social class or economic level, and often tends to separate off minority groups and to produce animosities against dissimilar elements. The " neighbourhood unit " concept often includes the trait of social mixture, which does not, in present experience, in itself produce neighbourliness. Replanning might take the form of reshaping existing small areas to give them an outward form thought to be appropriate for a neighbourhood, or of transferring the population of such an area to a new and isolated site. In either case there seems no guarantee that neighbourliness will be the result if it was not there beforehand. Further, a study of existing neighbourhoods where neighbourliness is found reveals no standard pattern ; and some of these are far below acceptable standards in their material construction and setting.

(*b*) The lives of the more privileged have never been " localised " ; they have had their closest links in professional groups, exclusive clubs, " good society " in London, and so on. As the standard of living rises one class after another tends to imitate the privileged, to insist on individual freedom of choice in association with others, and to range more widely in space in finding such associations. This gives diversity to life, and makes for specialisation and independence in interests.

(*c*) An inevitable result of this diversification is that groups and institutions do not find their clientele in the same territory and among the same population : each develops a " catchment area " of its own, not corresponding to that of any other : and these cut through and overlap the boundaries—or what might serve as the boundaries—of neighbourhoods. Thus personal associations become divorced from definite territorial areas and

limits; "interests" replace contiguity of dwellings as social bonds.

(*d*) Large scale organisation and the accompanying specialisation have no use for neighbourliness: for their purposes integration in the team—itself an integrated portion of the monster organisation—is the operative and essential relation. Neighbourliness, if it is to exist at all, is a leisure time interest. There are well-known exceptions to this general trend; but they are mere exceptions.

(*e*) No doubt much can be done in planning and replanning the service of consumer needs so that these are provided in the same local unit as the consumer's home. It would, however, be dangerous to carry this too far; opportunities for ranging more widely must be provided; the small unit will fail to keep the whole allegiance of those with wider and more specialised interests, keener sense of responsibility, and greater ambition.

The foregoing paragraphs aim at expressing a warning against the current over-estimate of the advantages of the "neighbourhood unit." This, however, does not mean that the small residential unit is not acceptable as an element in urban layout. Tentatively it may be suggested that groups of dwellings—possibly housing much fewer than 5,000 persons*—should form units in the patterns of the town: these would foster neighbourliness and convenient access to elementary services. But such neighbourhoods should not be envisaged and provided for as self-contained, and should not be isolated or artificially delimited; lively intercourse with other parts of the city or conurbation should be encouraged.

D. PRACTICAL—

Some Administrative Problems

Our final task is to attempt an answer to the question how, in the day-to-day tasks of building and planning, architect and sociologist may be brought together and find ways of giving their best service to each other. As major problems of local and central administration are involved, only outline suggestions can be set down here in dogmatic form.

First comes the problem of making available to the architect, and to the public whose support he needs, the sociological material already in existence; and the related problem of research and study aiming at the assembly and ordering of fresh materials. This is a task for the trained sociologist; the first step is to provide more trained sociologists, the second to procure their employment by Local Authorities. From now on every planning team should include a sociologist. The local survey carried out by sociologists employed for a limited period, and aiming at a finished product—a Report—at its end, may still offer useful results for the architect's purpose; our best efforts, however, should now be given to the establishing on a permanent basis of local survey offices, staffed by teams of sociologists who would carry on a continuing process of recording, investigating and summarising, and would be available for constant day-to-day consultation by the architects and planners of the Local Authorities, by other local officials and by anyone else interested. In connection with such survey offices there should be Information or Public Relations offices that would undertake the communication to the public of the results of the local survey, the achievements of the architects and planners, and the other activities of the Local Authorities. These new types of local administrative effort would no doubt be in touch with Central Government departments co-ordinating their methods and results.†

Once the sociologist is universally recognised as part and parcel of the local team, he becomes a sort of "Medical Officer" of Environment with duties not unlike those of the Medical Officer of Health. The latter has every year to publish a survey of the Health Services of his area, with statistics, inferences, and schemes for the future. Similar annual publications in the fields of building and planning and general development will be essential if the public are to be kept fully informed and sympathetic; and for these the sociological basis is essential. The setting up of a live Public Relations Agency is also the key to the satisfactory and democratic solution of the many complex problems. In this way, a more fluid relationship can be created between the elected rulers and the ruled, and those who build and plan will stand more chance of tempering every aesthetic caprice to the solid requirements of busy citizens.

There is a more limited sense in which administration will benefit from the penetration of a sociological outlook and attitude: i.e., by co-ordination and unification of its own efforts. All observers of Local and Central Government agree that these suffer from the "curse of departmentalism"; in Local Government the attitudes bound up with this have been encouraged where, as in the field of planning and building, the Authority has been an adjudicator instead of an initiator. It is clear that we are now in transition to a time when something more positive is required: there must be vital initiative, equipped to view local problems in a comprehensive fashion, to direct and co-ordinate local effort towards their solution, and to adjust and readjust schemes in detail in accordance with current changes. All that has been above suggested on the function and value of sociology applies here with full emphasis.

There is a strong temptation to pursue this discussion into the field of taste as treated above, and to ask if the sociologists have any suggestions to offer towards abating the nuisance of officials, members of committees, and other important persons who impose their lack of taste and inspiration on their cities or countrysides, to-day and for future generations. Sociologists can at once reply that they know very well how to investigate the problem, to diagnose the disease: they may well ask, in turn, whether the remedies that would suggest themselves when this had been done would have any chance of acceptance?

This is indeed one aspect of the problem of our time. It may be said with general acceptance that the basic principle of planning is the satisfaction of human needs, the enrichment of human personality. To this objective sociology can contribute careful diagnosis and measurement which can not only point towards the solution of particular planning problems but also provide the evidence in support of their urgency. It is said, however, that we must be careful that we do not allow our passion for objective measurement to mar the true understanding of subjective and personal human requirements; that the danger of this is great, because we live in an age when symbols can so easily be a substitute for reality; the symbolical sanctity of democracy, socialism, planning, and so on often clashes with the real sanctity of man, so that in the attempts to save our urban life from what we believe to be one form of slavery we may introduce another unless we can discover and impart the spirit that makes the city live.

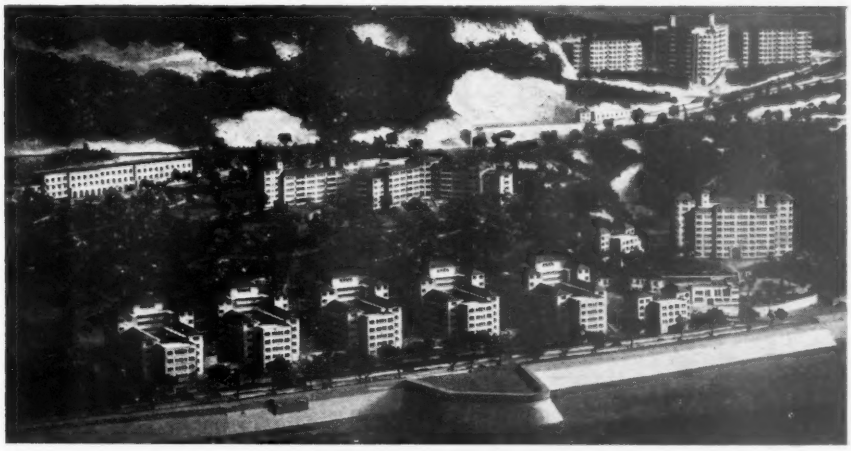
To this final challenge the sociologist can return only a halting response. He must confess that the spirit that makes the city live has not as yet become immediately perceptible or measurable by his available methods; like the rest of us, he experiences and studies not it, but its results. With more confidence, however, he will submit that perhaps the "imparting" of that spirit is just the task to which the whole succession of great saints, prophets, poets, artists, reformers, educators have dedicated themselves. The sociologist in turn can make his limited contribution: is it quite fair to expect him to do more?

The speech by Mr. M. Hartland Thomas [F.], *introducing the paper and the discussion will be published in the August Journal.*

*5,000-10,000 persons (mentioned earlier) seems to be a compromise figure. Is it fixed by reference to school population—or any other factor?

†It would, however, be an error to suggest that all sociological research can be organised in this way; fundamental research, not conditioned by practical planning problems, will be required in universities; the working out of general theories on past and contemporary societies, and on any feature of these, must be provided for.

GIBRALTAR HOUSING SCHEME



Architects :
Messrs. Robert Atkinson [*F.F.*]

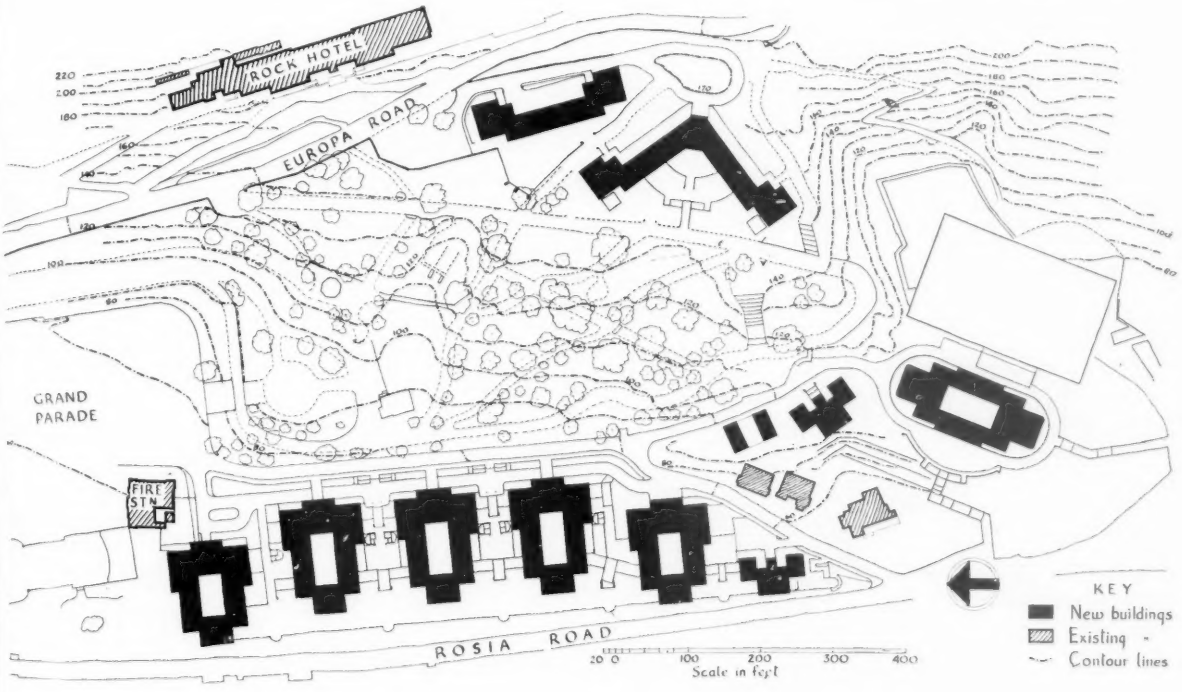
The Problem

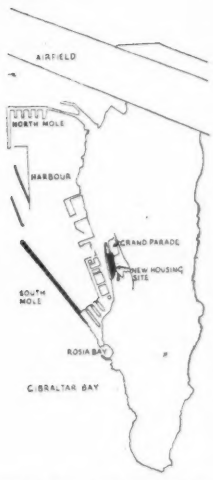
The programme for the Gibraltar housing scheme, though strongly influenced by the climate, the peculiar nature of the locality and the habits of the people, is not so very different from British housing practice as would appear at a casual glance ; the standards of accommodation and amenity are as high as in comparable British block dwellings on a congested site. The architects have made a careful study of local conditions, which are described in some detail below, and produced a design which is very suitable for the Mediterranean climate and a form of structure which meets the peculiar difficulties set by the site and by the local shortage of labour and materials.

The Rock is very congested, the population having increased considerably in recent years and all the best sites being occupied by the town and dockyards. The climate is a maritime one and therefore liable to be wet, but at the same time great heat is to be expected. The only available materials are limestone, sand and brackish water. Labour is mostly unskilled and much of it is imported daily from the Spanish mainland.

The Sites

Gibraltar consists physically of a very steep-sided limestone rock with an enormous sandbank on the West side facing Gibraltar bay. Thus new buildings have to be sited either on the Rock, which has a slope of about 35 degrees, or on sand which gives poor bearing. In any case high flats had to be provided because of the site congestion. Foundation on the Rock is being obtained by excavating suitable level spots and filling them with mass concrete. Over the sand a concrete carpet is to be laid down to cover the whole site, as removal of the top soil would render the sand liable to be quickly eroded by





Key plan showing housing site

rain and wind. The structure of the blocks of flats is to be founded on this carpet.

ACCOMMODATION

Accommodation is being first provided in two blocks founded on the Rock and six on the sand; other blocks are planned for later development. There will be 730 flats housing 3,000 persons. Future blocks will allow a total accommodation of 5,000 persons. Each flat has an average floor area of 750 square feet and consists of living room with balcony or loggia, two or three bedrooms, bathroom and kitchen. In Gibraltar it is the custom to take meals in the kitchen, so these are of a generous size, but in some cases a working kitchen is planned as an alternative. Arrangements are made for extra bedrooms to be taken from the adjoining flats. Floor heights will be 10 feet from floor to floor, which is a foot higher than is usual in Great Britain, to allow for the greater air space customarily provided in the Mediterranean latitude.

STRUCTURE

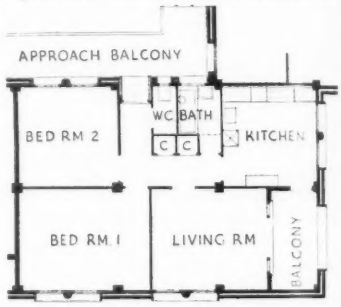
The structure is very severely conditioned by the peculiarities mentioned above. The absence of skilled labour on the Rock means that the great majority of it will have to be imported from England. At the same time the congestion of the site does not allow for the assembly of large quantities of materials: these must arrive in a regular flow and be built in soon after they are brought to the site. The building system and procedure had to be designed to be as fool-proof and repetitive as possible, avoiding the need for a great deal of skilled craftsmanship and using methods which could readily be picked up by the unskilled local labour. Thus the availability of crushed limestone pointed to the use of mass concrete and pre-cast concrete floor and wall units.

The main structure of the blocks consists of a steel frame completely fabricated in England which can be erected immediately it is delivered on the site. The frame is designed on a uniform square grid which will be common to all blocks. On this frame, floors of pre-cast concrete units of simple standard section, made in Gibraltar, can be erected immediately upon arrival at the site. The walls and main partitions are to be of pre-cast concrete bricks with window surrounds, etc., of the same material. Other partitions are of a local terra-cotta block. The roofs are to be covered with Spanish tiles from the mainland and fixed to steel roof trusses which are part of the framework.

All Mediterranean countries have a good plastering tradition. Therefore the external wall surfaces will be finished in plaster, coloured light yellow and brown, to harmonise with the general colour scheme of the old city. The whole of the piping, services and drains will be prefabricated in Great Britain as far as possible. Drainage is on the one-pipe system.

PLANNING

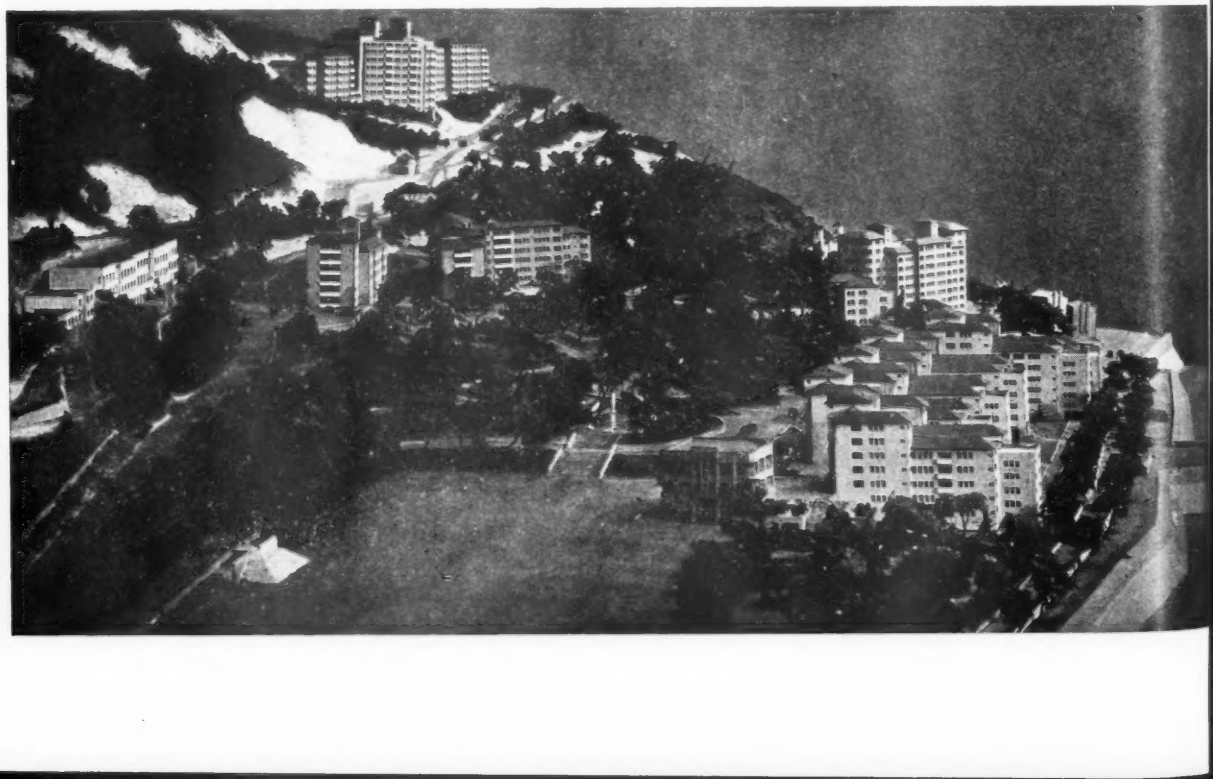
Because of the steep slopes, entrance to the different floors is effected at various levels, the floors being numbered "Plus" from a middle level and "Minus" below it. In the lower blocks on the sand foundation entrance arrangements are such that no occupant would have to walk up or down more than a few floors, so that lifts are unnecessary. The blocks on the rock foundation are, however, provided with lifts, the bottom level being approached by an entrance tunnel from the road. The slope on the site has been exploited to provide extensive views from the majority of the flats, both the groups and the individual blocks being stepped down the slope towards the West.



Typical two-bedroom flat

SPECIAL ACCOMMODATION

In Gibraltar laundry is usually done at



Above: Typical massing of blocks on the slopes. The photographs are from a model

home and dried on the premises. Each block has a general wash-house with tubs and drying rooms; the roof spaces as well as the balconies and flat roofs can be used for open-air drying.

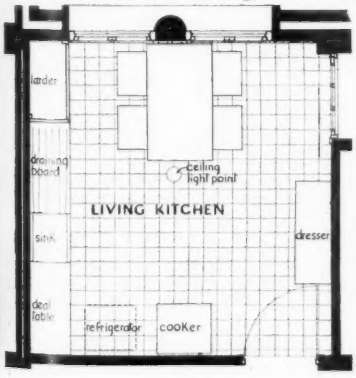
General storage for surplus goods, boxes, etc., is provided in each block together with pram and bicycle stores; a certain number of garages will be dug into the slopes and roofed over so as to form part of the gardens. A block of shops for immediate necessities is to be placed at the entrance to the estate and a restaurant may be provided for public use. Comprehensive garden layout is included.

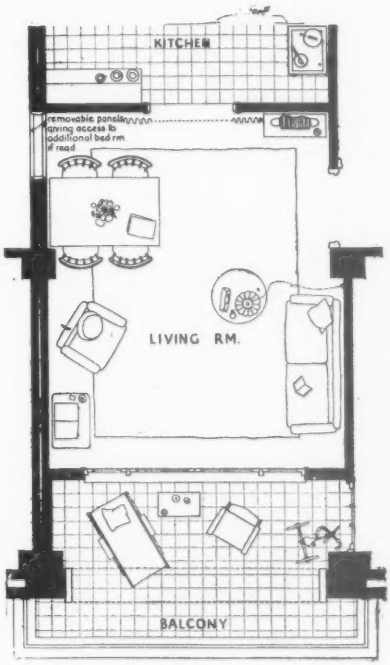
SERVICES

In Gibraltar the only drinking water supply is obtained from rain-water. This is collected from the roofs of all buildings in the town in large underground tanks; the municipality also has large storage tanks which collect the rain-water from certain areas of the Rock itself.

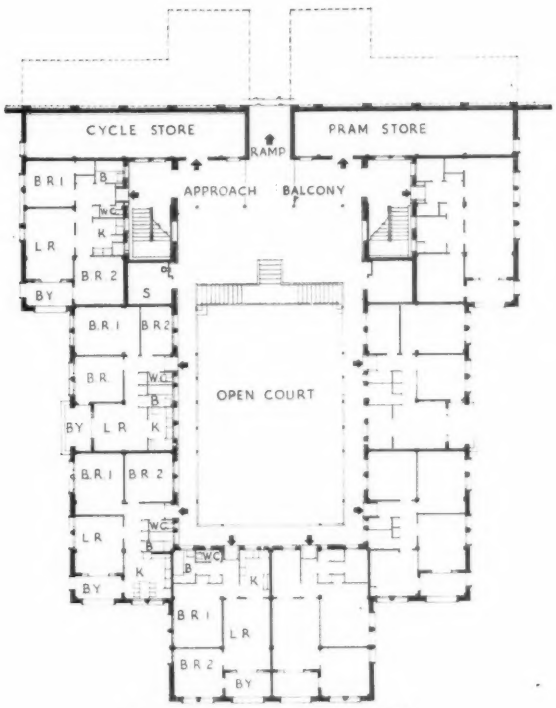
In the new buildings, provision is made to collect all rain from the tiled roofs and to store three-quarters of the season's fall, which amounts to 33 in. This rain-water, after chlorination and filtering, will be automatically pumped to the delivery tanks in the roof of each block and from these tanks there will be a gravity feed to the kitchen tap in each flat. The system will be connected to the town water drinking supply. Brackish water only is used for washing and baths and this will be supplied from the town mains.

Each flat will be provided either with gas or electricity for heating of water. It is proposed to make fairly general use of electrical immersion heated storage tanks, thermostatically controlled and fitted in the space below the draining-board in each flat. Heating is very infrequenly required in Gibraltar; a point for an electric fire in each living-room is the only provision.

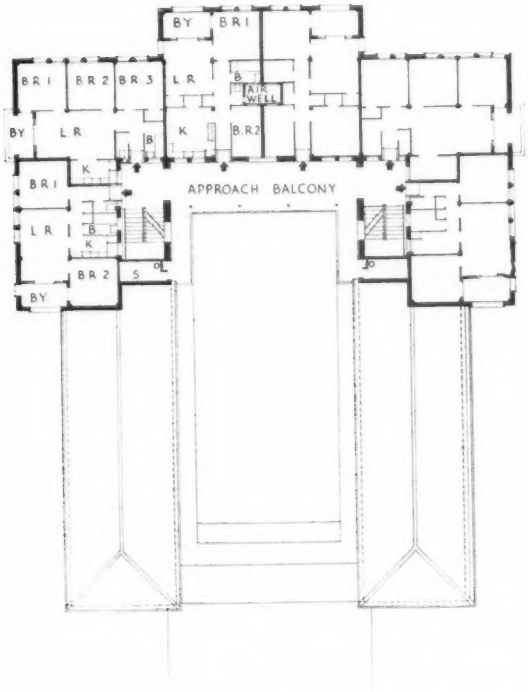




Left and right: Typical planning of living units



ENTRANCE MINUS TWO FLOOR

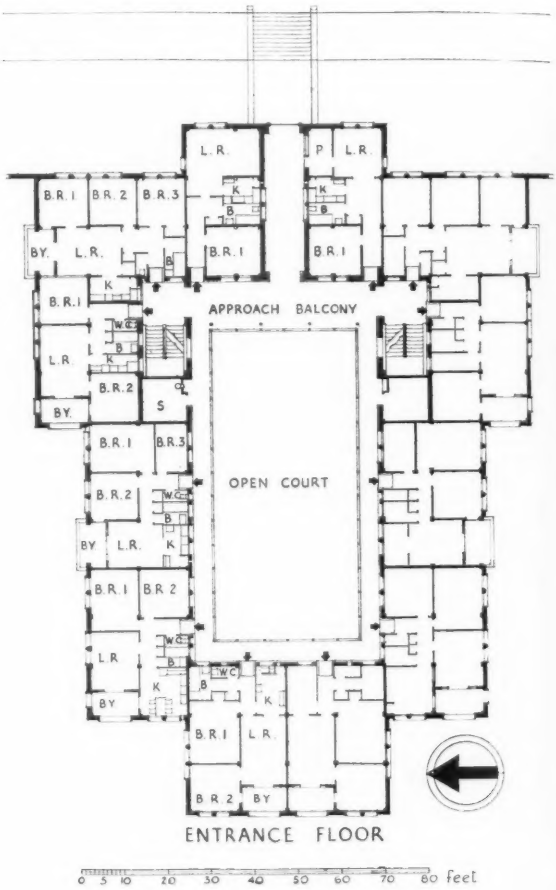


ENTRANCE PLUS TWO FLOOR

Refuse disposal is by means of shoots from each floor level which discharge into wheeled containers in a special chamber on the lowest floor. This will be collected daily in the winter season and twice daily in the summer.

FINISHES

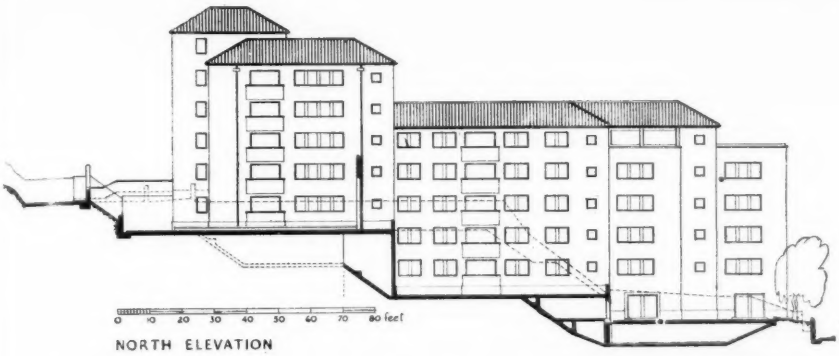
As steel corrodes quickly in the climate of Gibraltar, all windows will be of wood of the inward opening casement type. Windows to the South and West will be provided with louvred shutters and all loggias with sunblinds. The floors of access balconies and staircases are to be of a specially hardened non-slip granolithic and the wide approach balconies will have a similar floor finish. Balcony balustrades are formed with panels of galvanised metal mesh which will form an effective safeguard



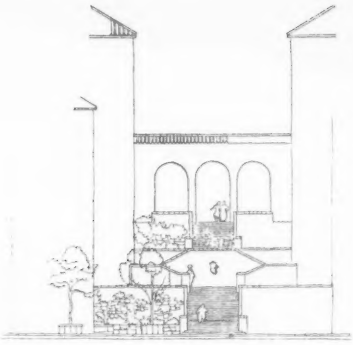
ENTRANCE FLOOR

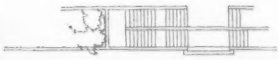
for children. The floors of bathrooms, kitchens and balconies in the flats will be tiled. A final decision on the types of floor for halls and living rooms has not yet been made. Doors will be faced with flush plywood veneer. Walls and ceilings will be finished in lime plaster and distempered. Bathrooms and kitchens will be painted and have a partial dado of glazed tiles around bath, basin, sink and draining-board.

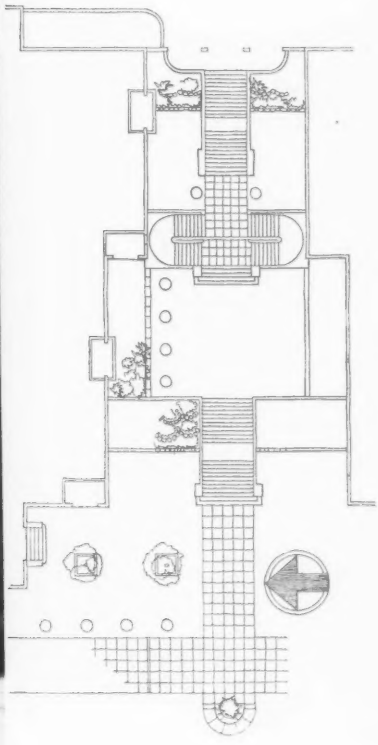
Architects: Mr. Robert Atkinson [*F.*] and Mr. A. F. B. Anderson [*F.*]. *Town Planning Consultant:* Mr. Clifford Holliday, M.A. [*F.*], T.P.I. *Consulting Structural Engineer:* Mr. R. T. James, M.Inst.C.E., A.C.G.I. (R. T. James & Partners). *Quantity Surveyor:* Mr. Cyril E. Kenney, F.S.I., A.M.I.Struct.E., under the general direction of Mr. R. W. Foxlee, C.B.E., M.Inst.C.E., Chief Civil Engineer, Crown Agents for the Colonies.

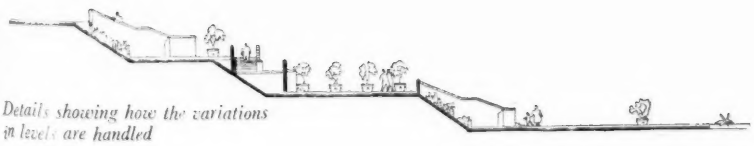


NORTH ELEVATION

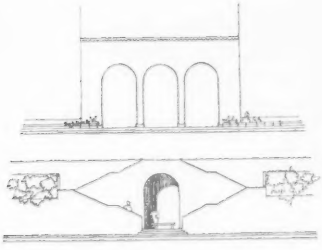


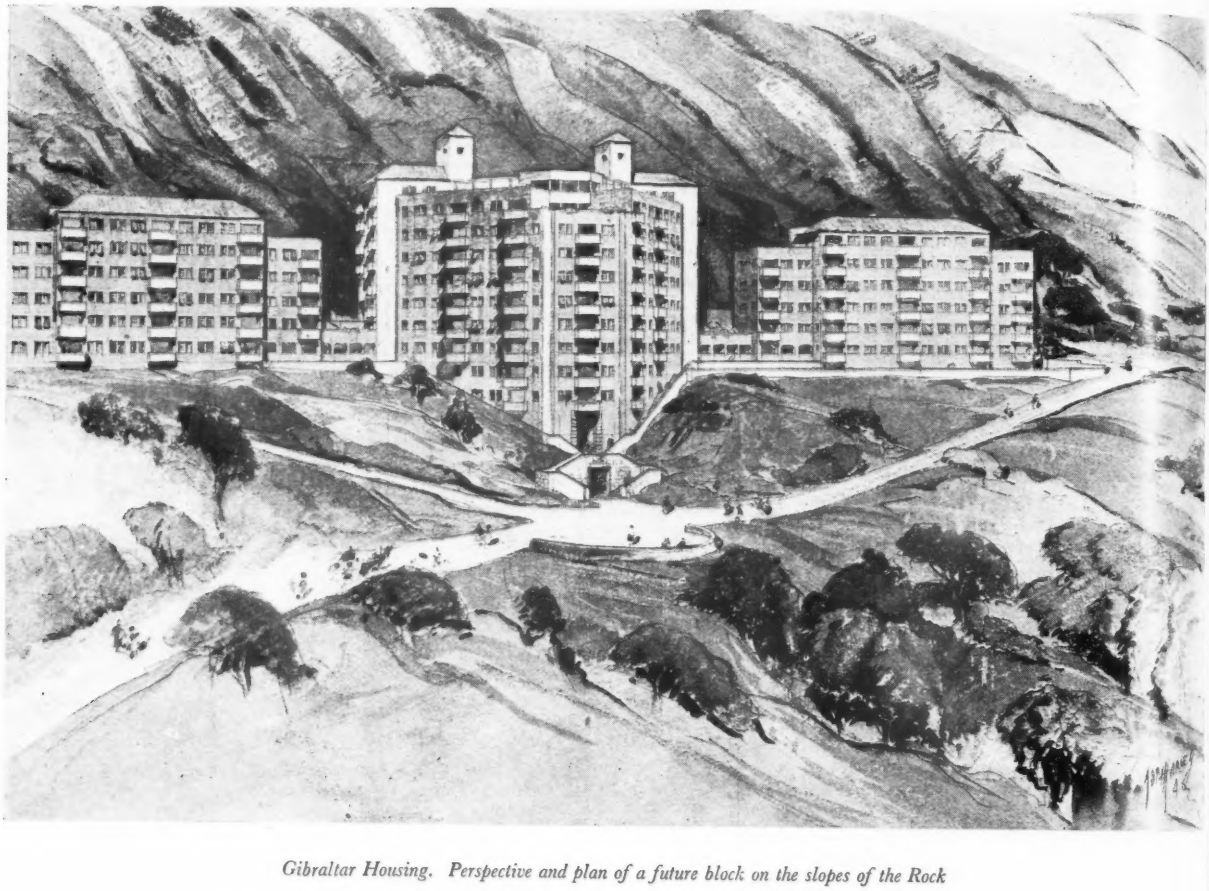






Details showing how the variations in levels are handled





Gibraltar Housing. Perspective and plan of a future block on the slopes of the Rock

STANDARD PRODUCTS FOR HOUSING

MINISTRY OF WORKS EXHIBITION IN LONDON

"The exhibition has been organised by the Ministry of Works, the Ministry of Health, and the Department of Health for Scotland, with the co-operation of the Ministry of Fuel and Power, the Ministry of Supply, and the Board of Trade," says the official booklet. While indicating the number of Government departments concerned with housing, it also shows that the exhibition has the maximum of authority behind it. British standards are, in fact, no longer a mere convenience to industry, but have become a feature of present-day architectural practice with which the architect must be conversant. Standard products are being given priority in manufacture, hence they are more readily obtainable than non-standard products.

The word "products" in the title should be noted. This is not an exhibition of materials in the sense that cement and mild steel are materials. The standards for these two materials specify their qualities, but not the form in which they may be used. All the objects in the exhibition, on the other hand (with the exception of concrete aggregates, etc.,) are a combination of design, form and physical qualities in fixed dimensions; they are in fact standard designs in standard materials. Therefore they can and should be judged with the critical eye of the architect in terms of form, texture and colour. Their physical characteristics may be left to the scientists and manufacturers, or at least one may assume so. Dimensions and designs have been agreed by all interests, including architects.

The exhibition is well arranged, easy to follow, and has the minimum of factual lettering. A combined Ministerial and Building Centre enquiry desk supplies any other information. The Building Centre is collaborating by acting as information centre, both during and after the exhibition, on sources of supply, the names of manufacturers having been omitted from the exhibits. This was done on purpose, mainly to direct attention to the fact that the products are to strictly official standards, and partly to avoid confusing the show with lists of names attached to each exhibit. Members wanting information on sources of supply should therefore apply to the Building Centre at either the London or Glasgow offices.* Copies of the British Standards can, of course, be obtained from the British Standards Institution.†

There is little new in the structural materials. Bricks, whether clay, sand-lime, or concrete, are what we have long been accustomed to. The same can be said of partition slabs, which are shown as hollow clay, breeze, concrete (including hollow block), and wood-wool, as well as of dampcourse materials. In the roofing group only a few of the wide range of colours in clay and concrete tiles could be shown, which is rather a pity because those selected are not very inspiring to the architect; the range of slates, on the other hand, is excellent.

Pitch-mastic flooring (B.S. 1093) is shown in six shades, ranging in colour from a medium reddish brown to black. Asphalt floors and pitch-mastic incorporating lake asphalt (B.S. 1177) are also shown. Magnesium oxychloride is on the market again after a war-time absence, but the colours shown are unexciting. Red and buff quarry tiles, those hardy perennials, showed up well beside similar colours in concrete tiles. It is a pity that the concrete tile should try to imitate the natural product; a solitary sample of concrete tile incorporating a white spar indicated the possibilities of this material.

Standard wood windows are of the light sections to which timber economy has driven us, and all casements have the stormproof weather check. They are made either without glazing bars, or with horizontal bars only, or with both horizontal and vertical bars. All are of dimensions to fit brick size openings. Metal windows have a relatively poor showing considering that their combinations of casement and fanlight, in different heights, are almost endless.

The improvement in design of doors, resulting from standardisation, is enormous. Gone are the bad panel proportions and hideous mouldings which made many architects avoid using stock doors before the war. The influence of the architects on the B.S. Committees can be discerned here. Standard dimensions (the 6 ft. 6 in. height is now universal) and standard lock positions permit the pre-preparation of frames, linings and mortising, in the factory. A door having a half-hour fire resistance (B.S. 459, part 3) as against the 10 to 15 minutes of the ordinary panel door, is shown, though it is not made clear that the frame and rebate design are essential factors in the fire resistance. Metal door frames (B.S. 1245) are made in two types, with three variations in profile for different partition thicknesses.

Wood trim is another product which has been vastly improved by standardisation under the eye of the architect. The old, hideous, dust-catching skirting and architrave mouldings are now happily replaced by simple profiles.

In the ironmongery section standard sizes of mortice locks form the second essential to factory mortising of doors. The door furniture and letter plates are all of very good appearance, the former being shown in four knobs and four lever handles, of various metals and plastics.

Many trades seem to be muscling into the rainwater goods market. In addition to the comparatively luxury lead and copper, there are cast iron, asbestos cement, sheet zinc, aluminium and galvanized steel. All designs are half round and ogee in gutters and round in downpipes, so the architect is left merely to assess their relative cost-to-life ratios—a task to daunt the hardiest.

Standard sanitary fittings are all of good design, and dimensioning allows the prefabrication of plumbing. The enamelled steel sink with two draining boards in one piece looks pretty, but one rather wonders how it will stand attack by the housewife's bucket and dropped knives. The fireclay washtub and sink (B.S. 1229) with common overflow and wringer bracket is a first-class design.

The fuel situation has led to revolutionary changes in heating and cooking appliances. Continuous-burning fireplaces and stoves, giving convection as well as radiant heating, are shown in several pleasing designs. There is a semi-insulated free-standing range and a cleanly-designed enamelled independent boiler. Gas and electric cookers are also much improved in looks.

A standard distribution panel having car-type fuses does away with fiddling with fuse wire, and incidentally, the risk of a wrong gauge of fuse wire being used. Switches and lampholders show the now almost universal use of plastics in electrical work, this material being even used for a complete slot meter.

The exhibition ends with a selection of standard cupboard fitments, with which the Housing Manual has made us familiar. They appear flimsy to traditional eyes, but derive their strength from plywood and from the fact that all shelves are fixed.

Could not the Departments responsible, or the British Standards Institution, maintain this exhibition as a permanency, adding new articles as they are standardised? Alternatively, or in addition, could there not be a booklet illustrating and giving the dimensions of all standardised products usable in housing? Such an exhibition and/or booklet would be of the greatest value to architects and builders engaged on housing. At present the architect has to keep dozens of copies of standards which give him particulars of the committees responsible and of the strengths and natures of materials, all in addition to the few vital dimensions which are what he most wants.

* The Building Centre, Ltd., 23 Maddox Street, London, W.1. The Scottish Building Centre, 425 Sauchiehall Street, Glasgow, C.2.

† The British Standards Institution, 28 Victoria Street, London, S.W.1.

PRODUCTION OF PREFABRICATED ALUMINIUM HOUSES

These photographs were taken during a recent visit to the Weston-super-Mare works of the Bristol Aeroplane Company where AIROH prefabricated aluminium houses are now being produced at a rate of eight per day. By 1 August production will be at the maximum of 50 per day.

The aluminium house, produced by Hiduminium Applications in collaboration with AIROH Technical Committee differs from other designs in being the most highly-finished in the factory. Only 40 man-hours are needed for assembly on prepared foundations. The house is assembled complete in four units which require little more than bolting together on the site and one connection each to water and electricity supplies and to drainage. Each unit is about 22 ft. 6 in. long and 7 ft. 6 in. wide and is transported complete on a lorry. Thus four lorries deliver a single house.

The Design

The house has been well illustrated in the technical Press, particularly in the *Architects' Journal* for 21 June 1945, so that it is not necessary to give more than a brief description in order to explain the process of assembly. The basic structure is a frame, with roof trusses, built up of extruded aluminium sections. The floor surface consists of boarding on timber joists bolted to the floor frames. The wall units have externally painted aluminium sheet and plasterboard internally. The inner faces of both these sheetings (towards the frame) are coated with bitumen to act as a safe water seal and the interspace is filled with a lightweight foamed concrete as thermal insulation and stiffening. The roof is covered with aluminium sheet decking consisting of a square corrugated sheeting underneath and a flat sheeting above. The ceilings are of fibreboard with glass silk quilting above. Partitions are of a construction similar to the external walls but faced on both sides with plasterboard.

The house incorporates the Ministry of Works heating and plumbing unit, originally designed for the Portal house, though with recent modifications. The house is fully wired in the factory, electrical connections between the units being made on the site by means of plug and socket joints.

Fabrication of Floor and Wall Units

A factory originally designed for the production of Beaufighter aircraft has been adapted. Three shops are used for manufacture of components and one for assembly, though some of the smaller parts, such as pipe work and windows, are fabricated in another factory nearby.

The wall and floor frame units are assembled and riveted together on jigs (Fig. 1). The assembled floor frames are then fitted with joists and boarding on adjacent platforms (Fig. 2). It is interesting to note that as yet no better method of doing this has been developed than the traditional one of nailing and punching, though the ends of the boarding are trimmed with a hand power saw. The wall frames have the external sheet of aluminium riveted on and are then transported to another shop for filling in. The first stage of filling is spraying with bitumen on the inside of the facing sheet and the sides of the frame (Fig. 3).

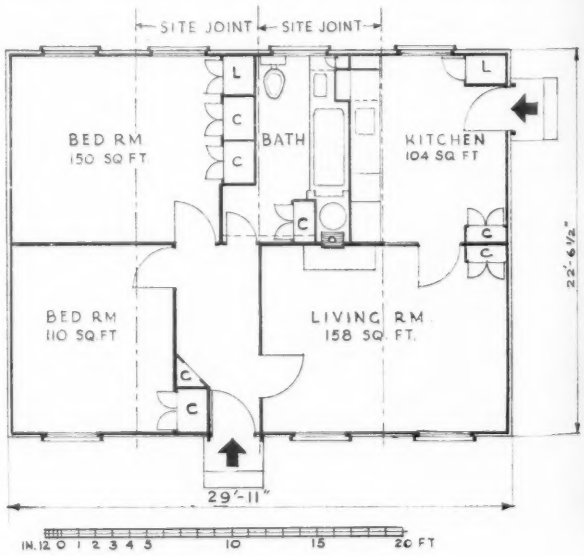
The filling process virtually begins at a concrete mixing plant whence the wet aggregate is pumped to a battery of six pouring machines. The framed units are laid flat on a system of rollers and fed under the pouring machines (Fig. 4) where the panels are filled with the foamed concrete mix. They are then pushed over the rollers to a battery of six steam curing ovens 100 yards long through which they slowly progress, arriving at the other end with the concrete set hard. Still flat, the panels next receive a second sprayed bitumen coating, on top of which are laid the inner plaster sheets. These sheets are also nailed to wood fillets, fixed to the edges of the wall framing. The wall unit is then complete.

Fabrication of Roof Units

Roof trusses and sheeting are made up in an overhead gallery which has been erected across one end of the main assembly shop. The trusses are first assembled and rivetted on jigs and then made up with the decking into sections of sizes to cover each of the four building units (Fig. 5). The complete roof sections are then lifted by a travelling crane and dropped over the edge of the gallery to the houses being assembled on the floor below (Fig. 6). We observed that six men can easily lift one of these complete roof sections.

Assembly

Meanwhile beneath the gallery, the floor units are first placed on four assembly tracks and have the wall and partition units and the plumbing and heating units fixed to them (Fig. 7). At



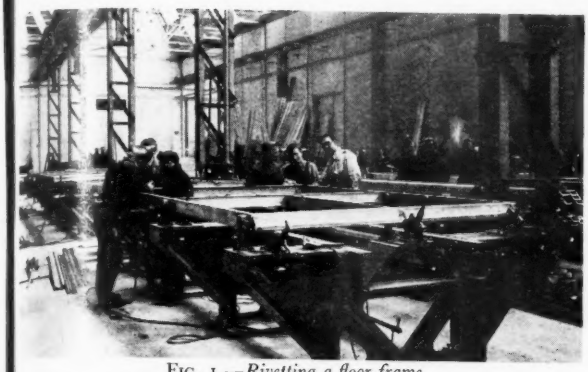


FIG. 1.—*Rivetting a floor frame.*

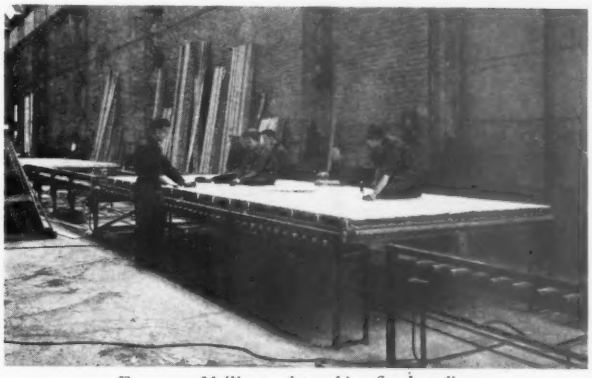


FIG. 2.—*Nailing and punching floorboarding.*

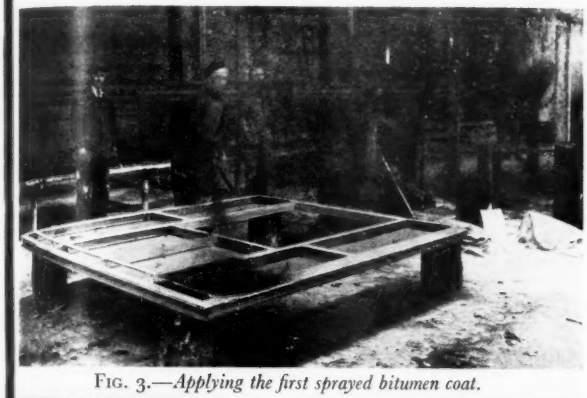


FIG. 3.—*Applying the first sprayed bitumen coat.*

FIG. 4.—*Pouring the foamed concrete panel filling.*

FIG. 5.—*Assembling and sheeting roof sections.*

the right stage each unit emerges from under the gallery and receives its roof. It then travels slowly along the track, receiving its doors and windows (ready glazed), being wired for electricity and having its general finishes done, such as cover strips, gutters and rainwater pipes (Fig. 8).

When completely fitted up, certain parts of the unit are masked to protect them from spray painting (Fig. 9) which is done in four large heated booths through which the tracks pass (Fig. 10). The unit emerges with the paint dry at the far end of the booths ; the masking is removed, all details inspected and loose fittings tied up. It is then hoisted on to a wheeled platform which is towed by a tractor out of the assembly shop to the covered loading bay.

Dispatch

The loading bay has an overhead crane with a special lifting bar which holds the unit at its ridge. The unit is lifted off the wheeled platform, which is towed away by the tractor, and the delivery lorry backs underneath and the unit is lowered (Fig. 11). Exposed sides of the unit are sheeted down and the completed unit is dispatched (Fig. 12).

The whole process of construction is remarkably interesting to watch. There is no obvious sense of hurry, yet the work progresses steadily without noticeable hold-ups, doubtless a product of the firm's experience in mass-production of aircraft. Powered tools are used to the utmost and there is an absence of such common features of traditional building as the footrule and the handsaw. It is true that paint brushes were being used for touching up items missed by the paint sprays, but these are being gradually eliminated. The traditional builder would find many things to surprise him in this fascinating plant.

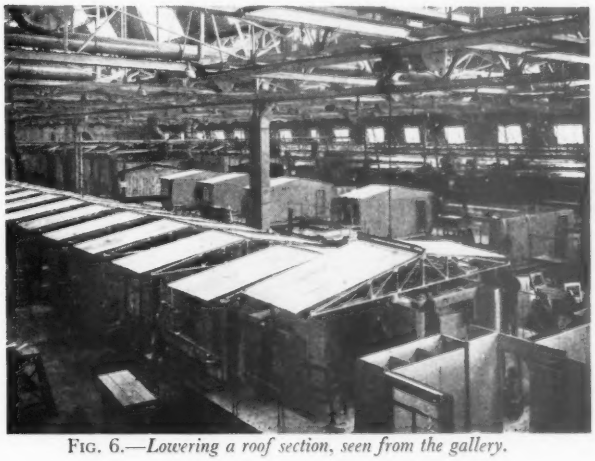


FIG. 6.—*Lowering a roof section, seen from the gallery.*

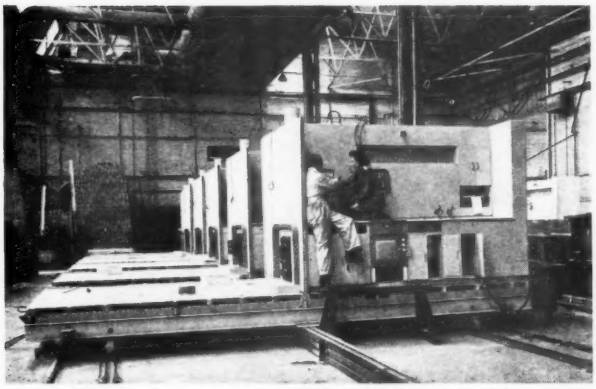


FIG. 7.—*Assembling the plumbing and heating units.*

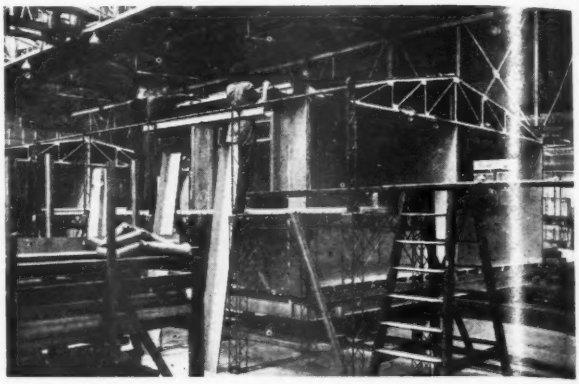
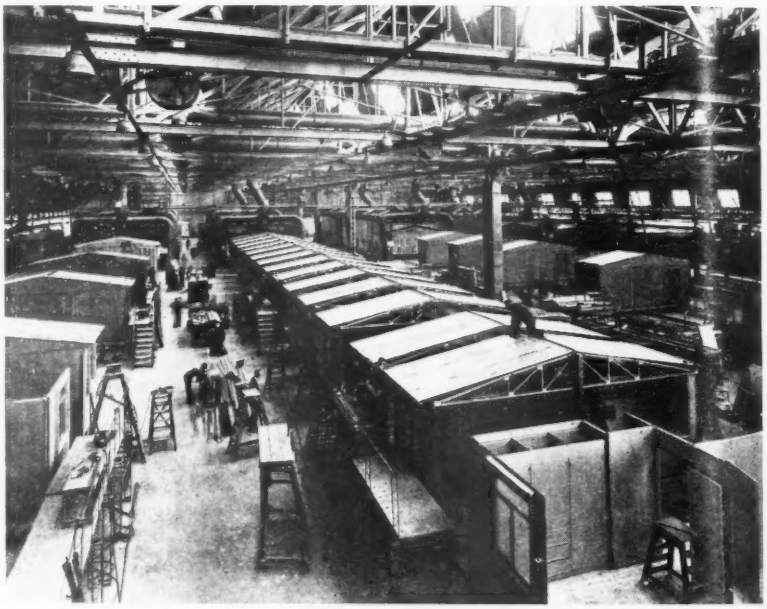


FIG. 8.—*Fixing gutters, cover strips, etc.*

The Future

The makers claim that this house, although in the temporary building programme, can be expected to have a life of at least forty years and they see no reason why it should not be used for permanent two-bedroom dwellings, where these are required, provided they are properly laid out. They have noted, however, that some local authorities are laying them out extremely badly, lumping them together in tightly-packed colonies which are bound to degenerate into slums.

The outcome of this method of house construction will be interesting to watch in the years to come. Only time will decide its efficacy. At present the cost is relatively high, but is expected to come down as production gets going and conditions become more stable. Ultimately everything will depend on the cost-efficiency ratio that is established as compared with those of other methods of house construction.



General view of assembly tracks. The fourth was not in use at the time of the photograph.

FIG. 9.—*Paint spraying.*

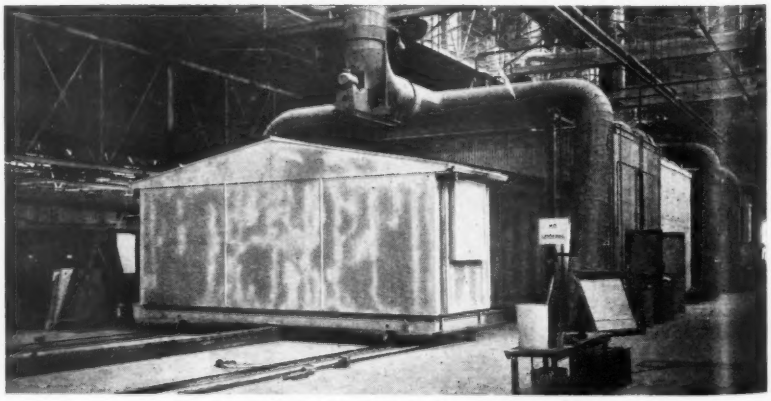


FIG. 10.—*One of the spray painting and drying booths.*

General view of part of the dispatch yard with the covered loading bay on the right and units mounted and sheeted on trailers ready for dispatch, on the left.

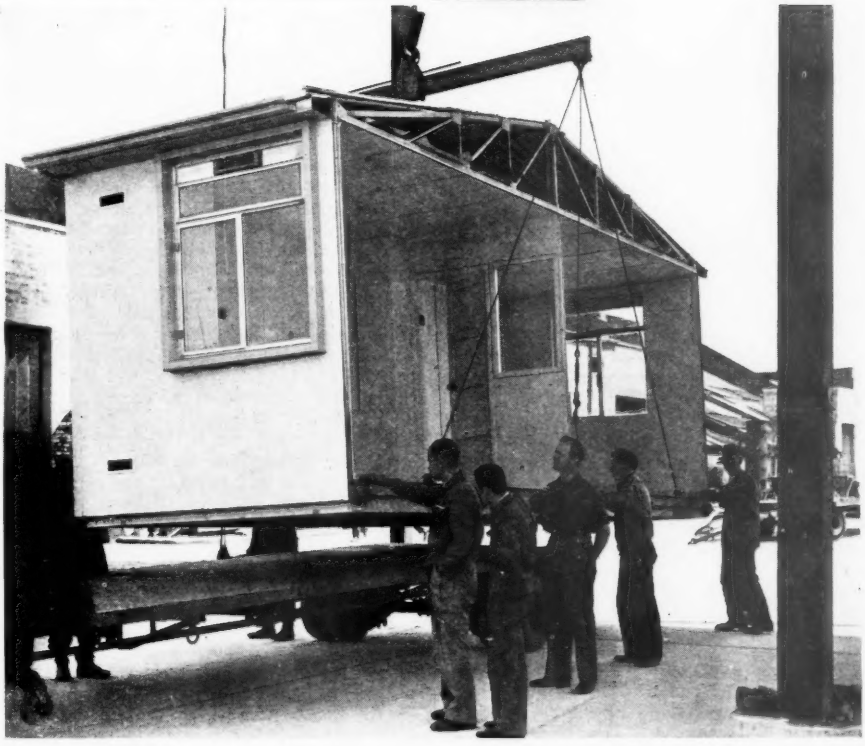


FIG. 11.—*Lowering a unit on to one of the dispatch lorries. These lorries had to be specially built with a low platform to give clearance of bridges.*

FIG. 12.—*Two units about to leave the yard.*

NEWS CHRONICLE "YOUR TOWN" EXHIBITION

OPENING CEREMONY AT THE R.I.B.A., 4 JUNE, 1946

Mr. BERTRAM CROSFIELD, Joint Managing Director of the News Chronicle, in the Chair

The Chairman said it was particularly pleasing that Sir Percy Thomas should happen to be President of the R.I.B.A. at this time. Nine years previously he had served on the Advisory Council for the *News Chronicle* Schools Exhibition and curiously enough had been president that year also. That scheme and the Knutsford scheme had gained remarkable tributes from the trade Press when the *News Chronicle* had celebrated its Centenary recently.

After describing the origins of the Knutsford scheme, Mr. Crosfield continued : " Since this exhibition was first opened in Knutsford by the Minister of Town and Country Planning, considerable publicity has been given to another satellite town not so far from London, where organised opposition and an unfavourable referendum greeted the proposals. There has been no Gallup poll or public vote in Knutsford, but at least we know that nearly every adult and resident of school age has seen these models which are now presented to you. Not one word of major criticism has reached us nor, since the display of the models, has there been any organised opposition. True, one of the big landowners has written to the Ministry of Town and Country Planning along lines which may be said to be unfavourable, but that was to be foreseen and is perhaps natural.

The two plans, that of Knutsford and that of Stevenage, have much in common ; the towns are of identical size—about 6,000 inhabitants each. If anything, there will be more of the central portion of Stevenage left than of Knutsford if the scheme before you takes full effect. Why, then, is it that Knutsford should have accepted the scheme while Stevenage was violently opposed to it ? The answer, I am sure, is to be found in the fact that, in the case of Knutsford, great trouble was taken before and during the planning time, first, to consider the susceptibilities of the townspeople and then to show them in model form what would probably happen.

Our choice of Knutsford was not an arbitrary one. In this Cheshire town there was an Urban District Council which had prepared the way for the idea of expansion in conjunction with the Cheshire County Council. The next step was to tell the residents that as Knutsford was sure to grow, a social survey was being taken to find out their way of life. In this the local W.V.S. co-operated, public meetings were held in the local cinema, and when the town planning consultant and the *News Chronicle* advisers talked about what might be done and showed the appropriate films, the scheme really became popular, and the effect on the future of Knutsford will be the result of the preparatory work which has been done. The exhibition of which the models are the outstanding feature is understandable, even to school children.

The question is what is to be the next step ? Here are the models. We have a large number of valuable reports on each aspect of the district. All these reports are in typescript and can be circulated to those interested. The next step would be the appointment of a Government sponsored corporation. I do hope the Government will not allow too great a time lag to elapse before starting going, because Knutsford wants the scheme to be realised and it would be of benefit to the neighbourhood in relieving Manchester of a number of small industries, and lead to a happier life when more people are able to live outside in pleasant and healthy conditions of this nature."

Mr. Crosfield then invited Sir Percy Thomas to open the exhibition.

THE PRESIDENT

The President said that architects knew the effect that the *News Chronicle* Schools Exhibition had had on the designs of school buildings in the immediate pre-war years. He could only hope that the Knutsford plan would have for many years a similar influence on the planning and expansion of towns in this country.

He continued : " There are several lessons we can learn from this marvellous venture, not least, how to put it across. I think this exhibition is practically a model of its kind in every sense of the word ; it shows clearly, even to those who pretend—as some people do—they cannot read plans, that with this scheme there is no such excuse.

Another way in which I think this scheme can be of great influence is through the people who prepared and made the scheme. I think, and I hope, Lord Reith, who has been such a fine chairman of the New Towns Committee, will come and see what you have done. In particular, I think you will be interested in the team-work of the various people who have set up the whole scheme, and as an architect I am very gratified to see the great part architects have played in those teams.

We often wonder who are going to take the place of the patrons of architecture who in the past were the only people who could have fathered a scheme of this kind. It seems to me that the patrons of architecture and town planning are going to be the common people as represented by county and local authorities. But many of us know that these local authorities will need a lot of guidance for many years, and it is efforts like this of your paper, and the power of the Press throughout the whole country who can help local authorities to realise their responsibilities. I think, if I may put it this way, this great effort of yours is something higher than making a fine plan for Knutsford. It does indicate a way in which the people of this country can be educated, how their imagination can be excited and their enthusiasm aroused. That is one of the great works you, Mr. Chairman, and your paper have done. I congratulate you on the way this exhibition has been set up and on the idea behind it, and I have much pleasure in declaring the exhibition open."

Mr. Gerald Barry, editor of the *News Chronicle*, thanking the President, said that the *News Chronicle* sincerely and warmly appreciated the co-operation of the R.I.B.A. in enabling the exhibition to be brought to London where a much larger audience of both specialists and laymen could study it than in Knutsford. He went on to say : " It is here in the capital that much of the planning is done that is going to affect the lives and happiness of millions of our fellow-citizens, and we thought it right and proper, therefore, that this contribution to planning should be brought here where the planners can literally poke their noses into it. Whether they will approve of what they see, and what their verdict will be, I shall certainly not presume in this company of experts, to pre-judge. But we have been greatly encouraged by the reception which the Knutsford plan has had, not only its reception by numerous town-planners and architects, but also by the architectural Press. The *Architects' Journal* remarked : ' The enterprise of a daily paper in promoting the essay in town-planning is another illustration in a new way of the advance of the social observer side by side with the architect. We hope the exhibition will travel extensively.' "

"The JOURNAL of the R.I.B.A., which gave generous space to a notice of the exhibition, also had one or two very generous things

to say about it: 'This is a real exhibition for the public. . . . The perspectives and pictures are excellent, and the models are quite the best town models we have ever seen. . . . They give one a positive nostalgia for the sort of town which modern town-planners envisage.' If that should be the verdict of those of you to-day, and of the public afterwards, we shall be more than satisfied. We want this to be a "real exhibition for the public." If we can convey to the ordinary men and women of this country something of the importance, the excitement, the adventure of planning and building, if we can encourage them to understand that the problem on the drawing board in the architect's office is really the problem of their own comfort and happiness by their firesides amid the community of their neighbours, then we shall consider that this exhibition accomplishes what we set out, with the help of so many able and devoted collaborators, to do."

REGENT STREET POLYTECHNIC EXHIBITION

OPENING CEREMONY AT THE R.I.B.A., 4 JUNE, 1946

LORD HAILSHAM, Vice-President of the Regent Street Polytechnic, in the Chair

The Chairman in asking the President to open the exhibition expressed the thanks of the Governors of the Regent Street Polytechnic to the R.I.B.A. for allowing the exhibition to be held in the Henry Florence Hall. It was natural, he said, that there should be a close liaison between the Regent Street Polytechnic School of Architecture and the R.I.B.A., but they were none the less appreciative of the signal honour done to the students, Mr. Walkden and the teaching staff. The layout and assembly of the exhibits had been done entirely by the school and he wished to convey the thanks of the Governors to the students and to the members of the staff.

THE PRESIDENT

The President said that among the many duties a President of the R.I.B.A. was called upon to perform, that of opening an exhibition of students' work was the most pleasing. He continued: "I have looked at the work of the School and in this connection I think we have to consider the difficulties under which most of the work has been done. Personally I think it is most remarkable that such a high standard should be attained when you consider the difficulties under which the senior years were working. All schools have had a thin upper stratum of the fourth and fifth years as a result of the war, and I always feel that unless there is a strong fourth and fifth year, it will be reflected on the whole work of the school because, however good the staff, the work of the senior students is essential to the progress of the whole school. That is why the work in many of the schools during the war years has been remarkable, for they have lacked the normal fourth and fifth years to help the earlier years to come to a high standard.

I have had the good fortune to see exhibition work of schools in Glasgow, Edinburgh and Newcastle and that of our own A.A. round the corner, but I can say honestly the work of to-day is up to the standard of the other schools I have visited. I say that honestly and I do think it is really wonderful and does pay a tribute, not only to the students but also to Mr. Walkden and his staff and I congratulate them very heartily.

It is appropriate that this Exhibition should be held here at this time, a time when the Board of Architectural Education and the Council of the Institute are considering the whole future of architectural education, and although we are supposed to have had in the past the finest system of architectural education in the world, we are not content to let it rest there, for we feel that in view of the work lying before us in the coming years, it is necessary to overhaul and review it wholly in the light of modern needs.

We all realise what the enormous amount of work there is to be done, although the architects in practice at the present time are doing very little and feeling frustrated as far as their wishes to do more are concerned. But it has this advantage to the students commencing their career, namely, that those starting now on a five years' course need not fear that all the jobs will have gone before they qualify. Hazarding a guess, I think the jobs will be only beginning when the first student comes out at the end of the fifth year. We naturally regret that, because we should like to be in on this opportunity which is coming and most of us will be five or six years older before that time. But the students won't worry about that.

I was glad to see a note to the effect that this school bases its full training and design on the study and appreciation of traditional work. That I hope will always remain one of the fundamental principles of any school of architecture. I am afraid it is rather irksome to some of the earlier students; they want to run before they can walk and feel it is a waste of time to study traditional architecture before they may do exciting things in glass and concrete. But I can assure them from long experience that if they want to be modernists, they will be all the better for having studied the traditional work first. All the best and real modern architects are those who were good traditional architects first, and that applies both in construction and in design.

There is one danger arising from this long period without actual building. We have had five or six years without any real building—we exclude war camps and aerodromes—and we shall probably have another four or five years. You cannot take eight or ten years out of building and still have progress and we must be careful that progress is not only on the drawing board. Real architecture is building and not designing on paper. There is a danger of some of us developing a character, a type of architecture, which has never been built and of the results of which we have had no experience.

Your school, in common with other schools of architecture, will suffer from overcrowding. I do not know whether Lord Hailsham can get over that difficulty, but throughout the country fond mothers are thinking there is a great future in architecture for their children and there will be long waiting lists in most of the schools. Priority must—and rightly—be given to those who return from the Services, and it will be difficult for schools in this country to find adequate accommodation in which to train all those who would wish to follow this most fascinating profession. It *is* a fascinating profession and I can assure you that after many, many years, I would not wish to change and would like to start over again.

The other thing is the need for teachers of architecture. Mr. Walkden has told me the School would be delighted to receive offers of part-time or whole-time teachers; we shall need all we can get in the years before us. With regard to the shortage of accommodation, I would say one word to those who are taking their course and find they have no flair for architecture and are there simply to complete a course. You must feel you have a flair or else you will never be any good, and I would suggest that such students should gracefully retire in favour of those on the waiting list. I congratulate the School on a most excellent exhibition, which I now have pleasure in declaring open.

Mr. A. B. Knapp-Fisher (Chairman of the Board of Architectural Education) and Mr. Sydney Tatchell (Chairman of the Architects' Registration Council), proposed votes of thanks to the President and to Lord Hailsham.

PRACTICE NOTES

EDITED BY CHARLES WOODWARD [*A.*]

IN PARLIAMENT

Acquisition of Property (Compensation Basis)

Asked whether he had any statement to make about the basis of compensation on the acquisition of properties in reconstruction areas, the Chancellor of the Exchequer replied: The Government have carefully and sympathetically examined the proposal that where a war damaged property qualified for a cost of works payment is acquired with a view to reconstruction of the area in which it stands the right to the cost of works payment should be transferable to some other site. They regret that they have found this proposal impracticable and that they cannot adopt it. They have, however, considered the basis on which monetary compensation is paid in such cases, and also on compulsory acquisition of property generally, and they have decided that the maximum supplementary payment to owner-occupiers which is now 30 per cent., should in future be 60 per cent. An order, which will require an affirmative resolution of each House of Parliament, will be laid before Parliament as soon as possible. (6 June 1946.)

War Damage Claims (Private Chattels)

Asked whether he would give an assurance that those people who have paid their war damage insurance regularly and now ask as legitimate claimants for payment on account for the loss of chattels by bomb damage, will not be compelled to undergo a severe means test, but will be treated as they would be by any insurance company where a legitimate claim was being lodged, the President of the Board of Trade replied: The underlying principle of the War Damage Act under which Private Chattels policies were issued is that payment should be deferred until a date to be determined by Treasury regulations, unless the Board of Trade are satisfied either that the repair or replacement of the goods is expedient in the public interest or that such payment is necessary to avoid undue hardship to the claimant. An insurance company is under no such statutory obligation. Everyone who has a valid claim under the Chattels Scheme can obtain advance payment provided he can satisfy the Board of Trade, in accordance with the provisions of the War Damage Act, that the payment is necessary to avoid hardship. The officers administering the power have instructions to treat claimants with the utmost consideration consistent with the carrying out of their statutory duty. (7 June 1946.)

Requisitioned Land

Asked how many acres of land previously producing arable crops are still requisitioned for military training purposes in the United Kingdom and how many acres of land are now held under various Defence Regulations for military training purposes which have never been previously in arable production, the Secretary of State for War replied: On 31 May 1946, 288,177 acres were held by the War Department under Defence Regulation 51 for training purposes and training rights were exercised over a further 1,939,905 acres under Defence Regulation 12. These figures include all types of land, and I regret that information is not readily available as to the proportion of the land which was previously used for producing arable crops and the proportion which has never been in arable production. Of the acres I have mentioned, 53,145 acres held under Defence Regulation 51 and 444,130 acres used under Defence Regulation 52 are at present in process of release. (7 June 1946.)

Small Dwellings Acquisition (Valuation)

Asked what principles of valuation are to be applied in order to arrive at the market value of dwelling-houses for the purpose of making advances under the Small Dwellings Acquisition Acts, the Minister of Health replied: The market value of the ownership of the house is to be ascertained by the local authority by means of a valuation duly made on their behalf in accordance with the ordinary principles. In order to provide for the increase in the market value of houses which has taken place since 1935 the limit fixed by the Housing Act of that year was raised by Section 6 of the Building Materials and Housing Act 1945 from £800 to £1,500. (7 June 1946.)

Water Act, 1945 (Orders, Publication)

Asked what arrangements he is making, by means of registration or otherwise, for bringing to the attention of intending purchasers of land the making of an order under Section 14 of the Water Act, 1945, the Minister of Health replied: In accordance with the requirements of the Act, full publicity is given to the making of an Order, including advertisement in the *London Gazette* and in local newspapers, and the deposit of the draft Order and a plan, for inspection, at convenient centres in the area concerned. Notice has also to be given in the *London Gazette* of my intention to lay the Order before Parliament. There are no provisions for registration of the Order. (7 June 1946.)

Brickworks, Wales

Asked how many brickworks are still completely idle in Wales, and what steps he is taking to get these into production, the Minister of Works replied: Thirty-seven brickworks in Wales are still inactive. Of these 17 will be in production in the course of the next two or three months, and storage is being cleared from nine further works. Efforts are being made to overcome the various difficulties in the remaining cases. (7 June 1946.)

Belgian Bricks (Government Purchases)

Asked whether he was aware that a substantial quantity of bricks was available in Belgium; and whether he proposed to take any action, the Minister of Works replied: A purchasing mission, acting on behalf of His Majesty's Government, has visited Belgium and contracts have already been placed for the supply of a quantity of bricks. These bricks will be purchased and distributed by the Government, who have appointed an agent to carry out the whole transaction. They will be used for housing and other priority works and sold at the controlled ex works prices of bricks manufactured in the areas of the ports of entry, plus such haulage and other charges as are permitted in the Bricks (Range of Prices) Orders. The cost in the first place will be met from the Building Materials and Housing Fund and the receipts from the sales will be audited to that Fund. A Supplementary Estimate will be laid before the House in due course to reimburse the Fund in respect of the difference between the total cost and the receipts. (7 June 1946.)

Greater London Plan (Green Belt)

Asked how many of the sites of homes in the Clayhall Estate, Ilford, were suggested for reservation in the green belt proposals of the Greater London Plan; how many of them it would be necessary to demolish in order to give effect to those proposals; and whether he would give an assurance that he would not approve any proposal for the demolition of those homes, or for their compulsory acquisition for that purpose, the Minister of Town and Country Planning replied: The boundary of the Green Belt as shown in the Greater London Plan is intended to be diagrammatic only and any figures as to the number of sites of homes included in it would be valueless. Although it is the Government's policy to preserve the Green Belt from general building development, there is no intention to demolish houses already erected, or in course of erection. I regret that needless anxiety should have been caused to residents in the part of Ilford concerned by irresponsible Press reports on the subject. (28 May 1946.)

Building Licences

Asked how many licences have been granted by his regional licensing officers in the Administrative County of London since July 1945 for work on non-residential properties and on hotels and clubs, the Minister of Works replied that separate figures were not available for the Administrative County of London, but his Licensing Officer for the London Region, which includes the Administrative County of London, has since July 1945, up to the end of May 1946, issued 29,613 licences for work on non-residential properties and 470 licences for work on hotels and clubs. Asked further what consultation his regional licensing officers have with the local authorities within the area of the particular local authority, the Minister replied that his regional licensing officers consult the local authority concerned before granting licences in all cases of work on dwellings and in various other cases where the local authority is in a position to give useful advice. Asked further why, when a local authority is willing to issue a certificate of essentiality in the case involved, the application for a licence on any work over £100 in value in an occupied house has to be referred to the regional licensing officer for decision, the Minister replied that those applications are referred to the regional licensing officer so that he may give a decision on his (the Minister's) behalf. The certificate from the local authority is the means by which their advice is obtained before the decision is given. (18 June 1946.)

Housing. Agricultural Areas (Rents)

Asked if he would make a further statement on the rentals to be charged for new cottages erected in agricultural districts, in view of the advice his Department had recently given to the Hungerford Rural District Council that the promised rental of 7s. 6d. a week must now

be regarded as a notional figure, the Minister of Health replied that the figure of 7s. 6d. was the figure assumed for calculation of the subsidy which should be paid to rural district councils for houses built for the agricultural population. That is only the assumed average rent and no promise was given that that should be the rent in every case. The actual rent to be charged for any houses provided by a local authority is a matter for the authority to decide. Asked further whether he would explain what his Department meant by "notional" and the dictionary says "imaginary," and does his Department agree with that definition, the Minister replied that it was obvious that the hon. Member had exercised his imagination quite considerably in putting this Question down, because, on several occasions, he (the Minister) had explained to the House that the 7s. 6d. rent was a rent based upon housing costs and upon the subsidy provided by the Exchequer and the subsidy provided by the local authority. The average house could be rented at 7s. 6d. on that basis. Asked further whether that was still an imaginary figure, the Minister replied that all averages were imaginary. (20 June 1946.)

Housing. War Damage Repair

Asked the limit to the amount that may be expended on repairing a war damaged house, the Minister of Health replied that there was no general limitation. In each local authority district, however, regard is had to the amount of outstanding work in relation to the supplies of labour and material before the local authority determines the extent of work to be carried out to war damaged houses. (21 June 1946.)

MINISTRY OF HEALTH CIRCULARS

Building Bye-laws and Prefabricated Houses

80/46. 16.4.46. The Minister of Health has considered the application of building bye-laws to new materials and methods of construction in the production of permanent prefabricated houses. He has realised that amendment of existing building bye-laws may be necessary. Consideration of these matters will take time and he has therefore decided to use his powers under Section 138 (1) of the Housing Act, 1936, and where a local authority proposes to construct permanent prefabricated houses of an approved type which do not strictly comply with building bye-laws, the Minister will be prepared to approve the plans and specifications providing all other requirements are satisfied. Application for the Minister's approval should be submitted to the Principal Housing Officer and should clearly indicate which bye-laws are contravened and in what respects. In Wales the application should be made to the Welsh Board of Health and where an application is made by a Metropolitan Borough Council the Minister will consult with the London County Council.

Solid Fuel Appliances

112/46. 14.6.46. This Circular issued to all housing authorities refers to the Simon Report on Domestic Fuel Policy, and owing to the fact that production of standard or improved patterns of solid fuel space-heating appliances with or without back boilers will not be adequate to meet all demands for installations in houses under construction and provide enough for essential maintenance, an Appendix A has been issued with this Circular giving notes for the guidance of housing authorities.

Until further notice local authorities are asked to make provision for the installation of only one such appliance per house in houses under construction in the normal urban area. In the normal instance the local authority will no doubt decide to install the only solid fuel appliance either in the living-room or in the kitchen living-room. The appliances from which a selection can be made are as follows :—

1. A solid fuel cooker with or without a back boiler and with an open grate or a closeable fire capable of burning all forms of fuel.
2. An openable stove with or without a back boiler capable of burning all forms of fuel. An openable stove is a closed stove of high efficiency which can be opened to give the effect of an open fire with reduced efficiency.
3. An open grate or a closeable fire with or without a back boiler. A closeable fire is an open grate which can be closed for slow and economical combustion.

Owing to the fuel shortage and the difficulty of meeting the demand for smokeless fuel, independent boilers should not be installed. Hot water supplies should be obtained from a back boiler to the living-room appliance or from a boiler in the solid fuel cooker.

Only one type of cooking appliance should be installed in each house. If a gas or electric cooker is installed, the solid fuel cooker referred to in (1) above should not be used. In rural areas, without connections to gas or electric mains, there will be some free-standing solid fuel cookers available for installation.

Where the solid fuel appliance is installed in the living room, the heating of parlours, bedrooms or other rooms may be met by building the chimney flue and constructing the fireplace of suitable brick or by eliminating the chimney flue and providing permanent gas or electric fires with means for ensuring air changes. In rural areas where public supplies of gas or electricity are not available, a small number of open grates will be available for installation in rooms other than the living room.

These restrictions apply equally to houses erected under licence as well as to those erected by local authorities themselves. Local authorities should ensure that when issuing priority certificates for building materials and components requirements for solid fuel appliances are calculated on one per house. In mining and rural areas where supplies of gas or electricity are not available, two solid fuel appliances per house may be ordered.

In future, except in mining and rural areas, all licences for the erection of new houses should include a condition that not more than one solid fuel appliance should be installed.

Appendix B attached to this Circular contains a design for domestic fuel stores with plans and sections. Where one type of solid fuel appliance is installed the store is based on an area of 12 sq. ft. and on an area of 24 sq. ft. where two types of solid fuel appliances are installed.

130/46. 21.6.46. This Circular deals with the use of premises for industrial purposes.

It is suggested that H.M. Factory Inspectorate should be informed of proposals to use buildings for factory purposes so that the proposed occupier could be advised whether or not the proposed premises were suitable or how they could be adapted to meet statutory requirements while avoiding unnecessary expense.

Local authorities are asked to notify the District Inspector of Factories of any proposals of which notice is given under Building Bye-laws and Regulations or to which consent is required under planning procedure, and in regard to this latter consent the Minister of Town and Country Planning associates himself with this request.

WAR DAMAGE REPAIRS

Professional Fees. Architects

The revised scale of professional fees payable by the War Damage Commission was reproduced in the issue of the JOURNAL for February last, page 136.

Paragraph 4 of the scale should be borne in mind as in claims costing less than £500 working drawings are not considered by the Commission to be normally necessary and therefore in such claims fees under paragraph 2 (*b*) only can be claimed. In exceptional cases the Commission may agree that working drawings are essential and in such cases fees under paragraph 1 will be paid in addition to those under paragraph 2 (*b*).

The Commission again emphasise that it has no power to repay professional fees incurred by a claimant in *making a claim*, either for a cost of works or a value payment.

The fees payable by the Commission are calculated on the "permissible amount" of the executed work. The fees on any excess over this amount is a matter between the professional adviser and his client.

Payment of Fees by Instalments

Where a firm price contract is entered into for the whole work two-thirds of the appropriate scale fee will be paid by the Commission with the first instalment payment on account of the executed work. As the Commission do not consider applications for instalment payments until the work of repair amounts to £200 or more, the two-thirds fee is not payable by them on the signing of the contract. The payment of fees, however, is initially a matter for the client, he being repaid by the Commission. The balance of the architect's fees is included in the final payment made by the Commission for the executed work.

Where the work is executed on a prime cost plus profit contract fees will be repaid by the Commission on the cost of the work so far executed. The fees will be in accordance with the appropriate scale percentage and would be claimed when an application for an instalment payment in respect of the executed work is made.

Partial Service

Where there has been no supervision or certification of accounts by the professional adviser, either because the client did not require him to perform these latter services or because some part (or the whole) of the work for which drawings and/or specification were prepared has had to be abandoned, *e.g.*, owing to further war damage, or requisition or compulsory purchase of the property, the Commission has decided that the fee to be allowed should be calculated as follows :—

(*a*) Where no supervision or certification is given. Two-thirds of the fee under scale 2 (*a*) or 2 (*b*) as the case may be.

(*b*) Where all the appropriate services are rendered but part of the work is abandoned. Full-scale fees on the work done and two-thirds of the scale fees on the work abandoned.

Where two professional advisers render the full services between them, the aggregate fees paid will not normally exceed a single full-scale fee on the prescribed scale.

Professional Fees in War Damage Work of a Repetitive Character

The War Damage Commission has decided that where for the rebuilding of groups of destroyed houses the professional adviser prepares plans of one house and these plans are used for other similar houses in the group, the fee should be calculated on the basis of paragraph 2 (*a*) of the Code of Professional Fees on the aggregate cost of the houses in the group for which the one set of plans are appropriate.

Quantity Surveyors' Fees

If during consultation with the Commission as to the most suitable form of contract for the required work of making good war damage it is considered by the Technical Adviser and the claimant's professional adviser that a contract based on approximate quantities is the most suitable, a quantity surveyor to be approved by the Commission may be employed by the claimant on the following terms :—

(i) Contracts based on approximate bills of quantities.

Preparation of approximate bills of quantities up to £10,000	1½ per cent.
Preparation of approximate bills of quantities over £10,000	1¼ per cent.
Re-measurement of the whole work	2½ per cent.

(ii) Prime cost plus fixed fee contracts.

In cases where the Commission's Technical Adviser considers it necessary to request the claimant to instruct an outside quantity surveyor to prepare (or check and agree) the estimates submitted on which the proposed fixed fee is to be payable, a fee of ½ per cent. will be paid for such services.

(iii) Rebuilding of totally destroyed houses of a repetitive character.

In the case of contracts which comprise the rebuilding of totally destroyed houses which are substantially the same in design and plan, the following scale of charges has been agreed by the Commission and the Royal Institution of Chartered Surveyors.

2½ per cent. on the first £4,000.
1½ per cent. on the next £6,000.
1 per cent. on the balance over £10,000.

The scale is to be separately calculated in each separate group on the total cost of all houses of each type substantially the same in design and plan.

Fees for the measurement of variations, valuing and reporting for payments on account, and other services, to be in accordance with normal scales.

The fees are exclusive of travelling expenses and costs of lithography. Where the Commission agrees that a complete and separate bill should be prepared for each house of the same design and plan in the group, a fee will be agreed with the Commission on a *quantum meruit* basis.

Under the Code of Professional Fees published in the JOURNAL of February last the fees for quantity surveying services are allowed on the normal professional scale, as stated in paragraph (6) of the scale. Circumstances under which these fees can be allowed are set out in paragraph (2) of "Circumstances under which Fees can be allowed."

TOWN PLANNING LEGISLATION

New Towns Bill

This Bill now before Parliament provides for the creation of new towns through Development Corporations established and financed by the Government. The Bill applies to England, Wales and Scotland.

The Minister of Town and Country Planning after consultation with the local authorities concerned, may make an Order designating an area of land as the site of a new town. This area may include as its nucleus the area of an existing town.

When the area has been designated the Minister will then establish a Corporation to develop the new town and this Corporation may undertake any activity necessary for the purpose of the new town. The powers and duties of local authorities and statutory undertakers in the area in which the new town is situated will not be affected.

The Corporation must obtain the Minister's approval to their development plans and he will consult with the local authorities concerned before giving approval. The Minister will make a special interim development order giving planning permission for any development carried out in accordance with the approved plans, and details of any proposed development may be required to be submitted to the planning authority.

A Corporation may, with the consent of the Minister, acquire land either by agreement or compulsorily. The procedure is the same as under the Town and Country Planning Act, 1944, and the safeguards in regard to statutory undertakers and open spaces are preserved.

Inalienable National Trust land and land belonging to local authorities can be acquired compulsorily only by an Order which is subject to special parliamentary procedure if an objection to the Order is not withdrawn.

In cases of immediate urgency the expedited procedure under the Acquisition of Land (Authorisation Procedure) Act, 1946, may be adopted, but the purchase of dwelling houses is excepted from this procedure.

The disposition of land by a Corporation will usually be limited to leases of 99 years, but if the disposal is to a Minister of the Crown or a local authority or in exceptional circumstances, the Minister of Town and Country Planning may agree to the transfer of the freehold or to a longer lease.

A local highway authority may acquire land by agreement or compulsorily in order to provide or improve highways communicating with a new town. The Minister of Transport may similarly acquire land for trunk roads.

The Corporation is deemed to be a housing association and will be enabled to build houses for the local authorities. Such houses will receive the Exchequer subsidy. Working-class houses built by the Corporation otherwise than at the request of a local authority will also qualify for the Exchequer subsidy.

Public Health functions will be under joint boards constituted by Order of the Minister of Health. Wherever possible the sewerage of a new town will be undertaken by the local authority or joint board, or by the Corporation itself failing either of those bodies.

A Corporation may by agreement and with the approval of the Minister and concurrence of the Treasury, transfer at any time any part of its undertaking to the appropriate local authority or statutory undertakers.

When the Corporation has substantially achieved its purpose it may be dissolved and wound up by an Order of the Minister with the consent of the Treasury, and the Order will require the approval of each House of Parliament. The remains of the Corporation's undertaking will then be transferred to the appropriate local authority or statutory undertakers.

The Bill applies to Scotland with the appropriate provisions relating to Scottish law.

NATIONAL FEDERATION OF BUILDING TRADES EMPLOYERS

Tendering without Quantities

The National Federation of Building Trades Employers have approved a National Rule in the following terms :—

"Members shall not tender in competition for contracts exceeding £1,500 in total value without Bills of Quantities being supplied. In the case of contracts for the repetitive construction of small dwelling houses the Bills of Quantities shall be prepared in accordance with the principles of the Code for the Measurement of Building Work in Small Dwelling Houses. This instruction shall not apply to contracts for repairs or contracts for painting or decorating only."

The attention of architects is called to this Rule, and particularly to those who have recently returned to their practice from war service.

The London Master Builders' Association approved a Rule in similar terms which was noted in Practice Notes in October last.

The word "repairs" in the exception to the Rule is a wide term, but a reasonable interpretation would appear to be that repairs which are capable of being expressed by Bills of Quantities would come within the Rule, and painting and decorating forming part of that work would also be included in the Bills. It is not thought that the Rule is intended to apply to all types of repair, and where Bills are not appropriate presumably tenders can be obtained on a specification.

CODES OF PRACTICE

The following Codes of Practice prepared by R.I.B.A. Codes of Practice Committees have recently been issued for comment :—

CP(B) 527. Concrete laid jointless on a concrete base.
CP(B) 528. Composition block flooring.
CP(B) 529. Calcium sulphate flooring (tentative).
CP(B) 530. Linoleum and cork carpet.
CP(B) 536. Calcium sulphate plastering.
CP(B) 551. Brickwork.
CP(B) 559. Decoration. Painting.
CP(B) 586. Roof Tiling.

COLOGNE TO-DAY

FROM AN ARTICLE IN THE BRITISH ZONE REVIEW OF 30 MARCH, 1946

As you approach Cologne from the east and cross the Rhine by the American temporary wooden bridge—so temporary that it has lasted a year, withstanding recent heavy floods—you are confronted with a skyline of jagged ruins, only relieved by the towering Cathedral which seems to stand sentinel over a graveyard.

Driving off the bridge into the city proper provides an awesome experience. The whole of the centre has been completely destroyed. So mauled in fact that no other course is open to the authorities but to raze the remnants to the ground, clear the rubble and start afresh.

Just off the main routes are cratered labyrinths through the ruins where winding processions of people pick their way between high banks of rubble. In places roads and ruins merge into a wilderness of destruction.

Standing amid this carnage it is difficult to form any sort of picture of Cologne in its day of splendour. If only something of beauty stood out intact, it would be possible to use it as a guide for the mind's eye. But even the Cathedral is a disappointment in that respect, for it bears unhealed scars. Most of the roof covering has disappeared and the vaulting is in a parlous condition. Many of the floreated heads are missing from the flying buttresses, which are heavily damaged. Some windows have lost their stone tracery and many others are seriously damaged. Repair work continues slowly for complete destruction of all machinery, lifts, cranes and even tools of the Cathedral workshops is a severe handicap.

The statue of Jan Van Wehrt, cavalry general of Wallenstein, still stands in front of the Rathaus (fourteenth, fifteenth and sixteenth centuries).

There were many people in Cologne—as always in an historic town—who hoped that the city's fame in the world of art and culture would preserve it from bombing assaults. But Cologne is the centre of a vast network of railways, linking the industrial Ruhr with Belgium, France and the Low Countries. It also houses a considerable number of engineering industries and on the river front are dock installations—port havens—that handled in pre-war days over 15,000 tons of cargo daily, mostly brown coal.

Altogether 1,500 large-scale attacks were made between 31 May 1942 and the final super-saturation raid on 2 March of last year. How many bodies still lie buried beneath the rubble is not known nor can any approximate figure be given for the German authorities have no idea how many victims the air raids claimed since June 1944. All records were then destroyed and returning refugees seeking relatives now provide the only clues. The figure is thought to run into thousands.

During the siege of Cologne Nazi defenders refused an American offer to declare it an open city and fought a hard and bitter retreat through the ruins as shells added further to the destruction. When the city fell Americans had to bulldoze their way through the rubble and for weeks these crude paths were the only lanes through the débris.

Official estimates put the destruction of the Third city of the Reich as high as 95 per cent. At the surrender it was 85 per cent. uninhabitable with a civic administration completely at a standstill, the railways paralysed and the five bridges over the Rhine twisted and broken in the swirling waters. Over a hundred barges and craft were sunk in the havens.

Looking around the devastated city it is easy to agree with people who contend that Cologne is finished. But a visit to the Stadtkreis offices provides a new viewpoint. Obviously, the greatest task that faced Military Government in Cologne, as in all blitzed cities, was the rehousing of the population for the winter. Only 80,000 people remained when the Americans captured the city, but returning refugees have swollen that figure to half a million.

Despite all warnings through press and radio, German authorities report a daily increase that outstrips the original housing plan. Considering that 40,200 houses out of a peace-time total of 58,342 were completely destroyed, and all but 8,000 very badly damaged, housing the community was almost a case of rebuilding the city.

Faced with this appalling devastation the civil administrators and the citizens, with their deep-rooted civic pride, have been pondering a question which to them loomed larger almost than every-day necessities the eventual design the rebuilding would take. Long controversial arguments took place in the press and in council meetings on the merits and demerits of re-creating the beauty of pre-war Cologne by closely copying its previous structures or of building anew in a modernistic style. While these æsthetic "battles" were being fought Military Government went quietly and patiently ahead with the immediate problem, and neither Gothic nor any other architectural style stood in the way of the erection of 85,970 first aid dwellings, a total which is still being increased at the rate of a thousand a week.

Repair work is severely hampered by the vast quantity of rubble choking the ruins and sidewalks. Over 100,000 tons were removed each month but this proved so costly in time and labour that it has now been decided to utilise the rubble where it is found for concrete. Stone-crushing machines have been obtained for this purpose.

Restoration of the crippled public utilities was undertaken with the same vigour. Despite the fact that over 50 per cent. of the electric cables were damaged, the electricity service now reaches all parts of the city except the totally ruined centre. The fact that the whole of the city has water is a remarkable feat in itself. After repairing the first 1,500 major breaks a similar number of minor ones were discovered when the water was turned on. As fast as one break was joined another was found. Repair work is still going on. The result, however, is that 60 per cent. of the

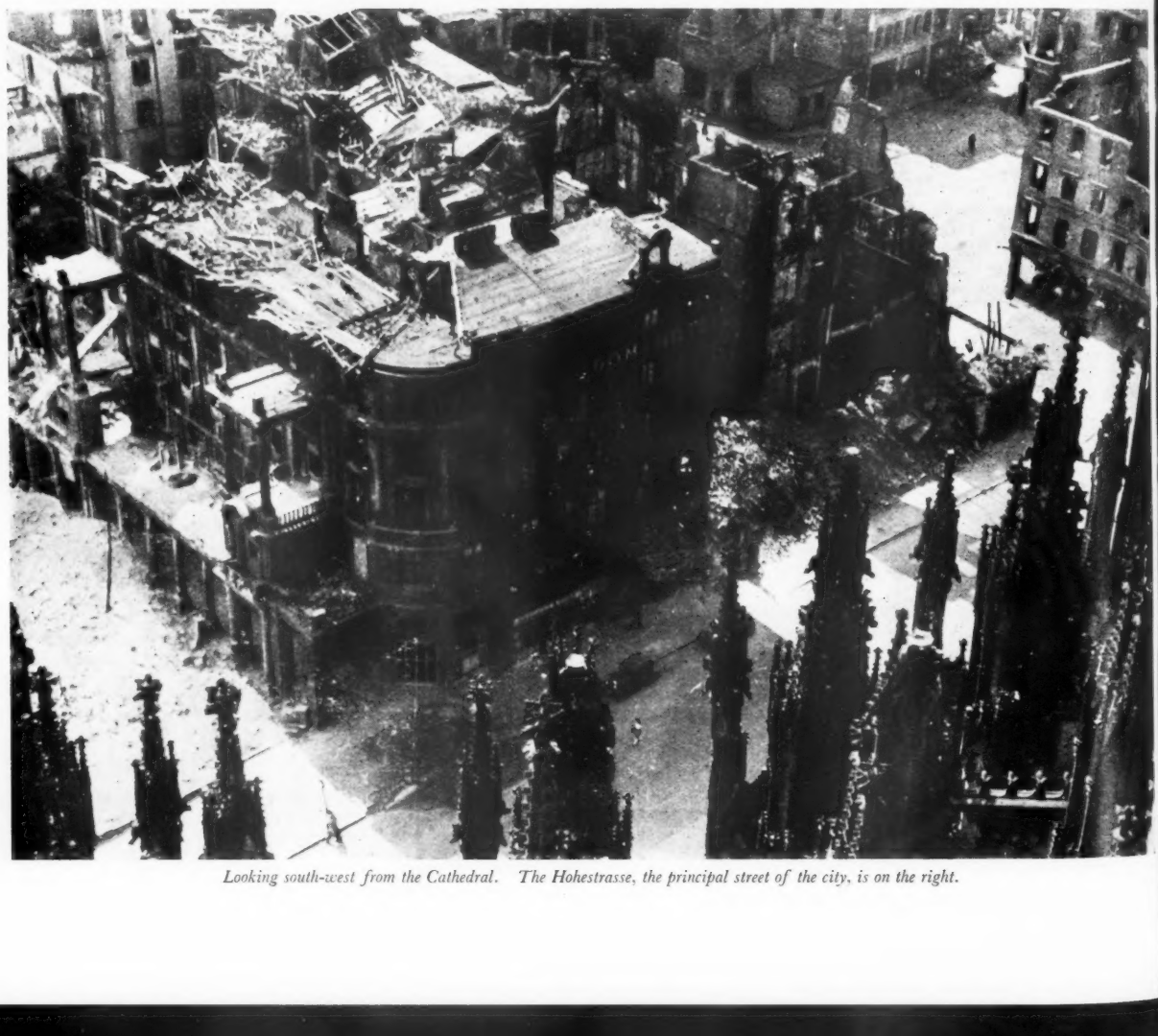
The Church of the Apostles (circa 1036) was hit by more than 80 bomb[s] and shells.

city has pressure water and the remainder is served from [h]ydrants.

Deep craters and shell holes played havoc with th[e] sewage system which suffered 600 serious breaks. In combating this problem a serious shortage of men fit to work in sewers h[a]mpered repair work. Sewage from the West bank used to b[e] carried under the Rhine by two syphon pipes six feet in diamet[er]. When Americans converged on to the city, leading Nazis escape[d] through these pipes, dynamiting the exit. Sewage from the W[e]st side, therefore, now has to be drained into the Rhine.

Being an important trunk junction, restoration of Cologne's telephone service was a priority job. But the dam[a]ge was immense. Out of 13 pre-war exchanges only two [a]re now operating, with one temporary repeater station manne[d] by the Royal Corps of Signals. These are all on the West bank, for the great Koln-Deutz exchange on the East side, which carried traffic from Western Europe, was sabotaged by retreating Germans who played flame throwers on it, causing two million pounds worth of destruction.

As this exchange is essential for connecting zonal trunk services with France and Belgium, extensive repairs had to be made. Seventeen old switch-boards have been fitted into the cellars and it is hoped shortly to have 30 more, ironically enough ex-Wehrmacht property. But there is a limit to the amount of pair lines available under the Rhine, which causes traffic delays.



Looking south-west from the Cathedral. The Hohestrasse, the principal street of the city, is on the right.

The oldest part of Cologne seen from the Cathedral. The open space in the centre of the picture is the Altermarkt. The bridge on the left is on the line of the Hänge suspension bridge. The large mass in front of the bridge is the remains of the Romanesque church of St. Martin.

The cultural rehabilitation of the city has by no means been neglected. There are about twenty fine old churches in Cologne, many dating back to the twelfth century, but most of them are badly damaged. First aid repairs to roofs were carried out quickly to prevent damage by rain and frost. A special grant has been made to repair the leading eight churches which, of course, includes the Cathedral. Most of the art treasures that could be removed were evacuated during the war. The famous University library is safe in the French Zone and arrangements for its return are being made.

Special attention is paid to the welfare of the youth of the city and the Detachment Commander takes a personal interest in Youth Club activities. At the moment there are four main groups each to be based on existing facilities, such as the West group, which uses the luxurious Stadium with its amenities for football, tennis, swimming, water polo, field and track athletics.

Eight cinemas and three theatres are operating in salvaged halls, but it is the opera and symphony concerts, performed in the auditorium of the University, that prove the greatest attraction to a people noted for their love of music. They are so keen that some of them travel nearly 12 miles to the hall, queue for most of the day and sit in an unheated theatre to listen to the performances.

The church of St. Martin built between 950 and 1250.

REVIEW OF PERIODICALS

1945-46—III

[N.B. The last instalment should have been numbered 'II, concluded.']

PLANNING, including UNIT PLANNING

PENCIL POINTS, *1946 January, pp. 82-89 :*
Modular co-ordination. Article by A. G. Lorimer on principles of modular design projected by American Standards Assn. A. 62.

INTERNATIONAL ; CIVIL

JNL., AMERICAN INSTITUTE OF ARCHITECTS, *1946 April, pp. 178-84 :*
U.N.O. capital : observations on a 1st meeting of A.I.A. Committee on the United Nations Centre.

ARCHITECTURAL FORUM, *1946 March, pp. 121-36 :*
" The Navy builds." Descriptive article on American Naval dry docks, shops, storage facilities, air bases, housing, recreation bldgs., hospitals, and chapels (illusd.).

COMMERCIAL

ARCHITECT AND BUILDING NEWS, *1946 March 22, pp. 181-8 :*
Commercial buildings. No. 3 in " How Architecture is Made " lectures by H. S. Goodhart-Rendel. Historical and æsthetic develpt. of office bdgs.

ARCHITECT AND ENGINEER (San Francisco), *1946 February, pp. 16-26 :*
Commercial buildings in N. Africa. Illusd. notes on 18 bdgs., offices, banks, shops, apartments.

ARCHITECTURAL FORUM, *1946 February, pp. 99-126 :*
Stores. Building Types Study 110. Planning, display equipt.

ARCHITECTURAL FORUM, *1946 February, pp. 118-22 :*
Stores. Illusns. and descrptns. of children's shop, candy dept., hosiery and jewellery stores.

ARCHITECTURAL FORUM, *1946 January, pp. 114-7 :*
International Harvester Co. local agency buildings ; " prototype designs," by Loewy for sales and service shops. Flexible plan characterised by standardised elements.

ARCHITECTURAL REVIEW, *1946 March, p. 86 :*
Swiss Life Insurance Co. bdg., Zürich, by Brothers Pfister.

ARCHITECT AND BUILDING NEWS, *1946 January 18, pp. 34-9 :*
Drawing offices for Bristol airplane co. E. Ross archt.

TRANSPORT

ARCHITECTURE FRANCAISE *1945 December, pp. 3-5 ;*
URBANISME (Paris), *1945 No. 105-6, pp. 47-9 :*
The evolution of transport and schemes for combined road, rail, air stations : general survey of possibilities, with conclusion that combination is not desirable ; articles by E. Bornecque.

ARCHITECTURAL REVIEW, *1946 March, pp. 77-83 :*
Unit-built stations. Pt. 1, the early developments, Pt. 2, the L.M.S. experimental unit, by L.M.S. Archt's. office, Pt. 3, the unit in use. The most complete description of the design.

BUILDER, *1946 January 25, pp. 90-2 :*
Loughton station (joint L.P.T.B.-L.N.E.R.) by Stanley Hall & Easton and Robertson, and electric sub-station.

LA MAISON (Brussels), *1945 November, pp. 253-6 ; December, pp. 286-9 and 303 :*
Modernisation and Reconstruction of Belgian Railway Stations. Analytical article by Charles Lemaire. (Illus.)

SCHWEIZERISCHE BAUZEITUNG (Zürich), *1946 January 12, pp. 13-7 :*
Recent timber construction for the Swiss National Railways. Small station bdgs. using laminated timber cantilevered platform awnings.

TEKNISK TIDSKRIFT (Stockholm), *1946 March 23, pp. 289-96 :*
Moscow metro. General and tech. description by T. R. Aström and S. Samuelson.

TEKNISK TIDSKRIFT (Stockholm), *1946 March 16, pp. 265-9 :*
Ship design : article on modern design tendencies. Illusd.

BYGGMASTAREN (Stockholm) *1946 No. 4, pp. 71-2 :*
Motor-ship " Malmöhus," interior design, by O. Nilsson.

ARCHITECTURE FRANÇAISE (Paris), *1945 December, pp. 3-43 :*
Road transport buildings and planning. Special No. Articles : Road transport buildings in England, America, France. Bus and coach stations, service stations. Loading docks. French transport service regulations. Fully illusd.

AMERICAN CITY, *1945 December, p. 117, 141 :*
" Service stations can be good neighbours." Shell Oil Co. standard design.

AIR TRANSPORT, *1946 March, pp. 62-3 :*
Airport architecture : the case for a Heathrow design competition Illusd. note on terminal bdgs.

BULLETIN TECHNIQUE DE LA SUISSE ROMANDE (Lausanne), *1945 February 5, pp. 29-34 :*
The airport planned for heavy traffic : its functional order and size. Article by J-J. Honegger. Illusd.

ARCHITECTURAL FORUM, *1946 January, pp. 104-6 :*
" Port of aerial embarkation." Project for air force base adjacent to airport. Complete station lay-out, incs. administration, barracks, repair and equipment dept., radar, passenger terminal, staff housing.

ARCHITECTURAL FORUM, *1946 January, pp. 122-8, 130, 132-134 :*
" What's wrong with our air terminals ? " Survey by M. Thompson of U.S. air terminal office, passenger and freight needs. Detailed illusd. analysis.

ENGINEERING NEWS-RECORD, *1946 January 24, pp. 75-8 :*
New York's Airport for World Commerce (Idlewild), Pt. 1. Plan, lay-out, access and financing. Illusd.

INDUSTRIAL

ARCHITECTURE ILLUSTRATED, *1946 March, pp. 29- :*
Factory at Distington, Cumbd., for High Duty Alloys Ltd., incl. laboratory and canteen. Phots. and plans.

BUILDER, *1946 April 5, pp. 330-2 :*
Radio valve factory, Treorchy, S. Wales, by W. E. and S. Trent.

LA MAISON (Brussels), *1945 August, pp. 161-3 ;*
" Industrial architecture and social relationship." Analytical article by Prof. C. Van Nueten (illusd.).

JNL., INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS, *1946 March 5, pp. 297-309 :*
Public Health (Drainage of Trade Premises) Act, 1937. Paper by B. Robinson, Boro' Engr., Birkenhead, and discussion.

JNL., ROYAL ARCHITECTURAL INSTITUTE OF CANADA, *1946 February, pp. 26-9 :*
Natural and artificial lighting of industrial plants, by E. L. Dodington : ltg. requirements, general design principles, systems fluorescent ltg. Bibliog.

BUILDER, *1946 March 22, 296 :*
Thermal insulation of factories. Note on use of " v " clip method for fixing insulating board.

WELFARE : HOSPITALS, etc.

MODERN HOSPITAL (Chicago), *1945 December, pp. 56-7 :*
Doctors' consulting rooms. Provision for private rooms in W. Pennsylvania Hospl. Plans.

LA MAISON (Brussels), *1945 August, pp. 155-8 :*
Hospital organisation. Analytical article by Gaston Brunfaut. (illusd.).

L'ARCHITECTURE FRANÇAISE (Paris), *1945 Oct.-Nov., pp. 1-68 :*
Hospitals special no. edited Roux-Spitz. Analaysis of plan, function and interrelations, by Dr. M. Nédelec ; the hospital in a general health organisation. Articles on hospitals in Britain, U.S.A. ; cités hospitalières, Lille and Niort, illusd. in detail. Long review Walter's *Renaissance de l'Architecture médicale.*

MODERN HOSPITAL (Chicago), *1946 March, pp. 43-66 :*
Hospital design and construction. Articles : Broader service, greater centralisation—plan relationships of depts., general problems equipt. Plan for 40-bed hpl. expanding to 60 beds. Plan 1,500 bed hpl. by Ellerbe, St. Paul, Minn. Health centre for rural needs, plan and organisation.

SCHWEIZERISCHE BANZEITUNG (Zürich), *1946 April 20 :*
Basel City general hospital, by E. and P. Vischer, H. Baur, B. L. Dürig. Description and illusn. of one of largest recent European hospl. schemes.

WERK (Zürich), *1946 February, pp. 37-50 :*
City hospital, Basel, by E. and P. Vischer, H. Baur, Bräuning, Leu and Dürig. Large general hospital completed 1943. Fully illusd. and described. An important reference.

MODERN HOSPITAL (Chicago), *1945 December, pp. 112-3 :*
Columbia Hospl., Milwaukee. Kitchens and staff cafeteria. Plan.

PROGRESSIVE ARCHITECTURE, *1946 March, pp. 53-61 :*
Faith hospital, St. Louis, Missouri. Sm. genl. hospl., by J. D. Murphy and A. G. Corrubia.

PROGRESSIVE ARCHITECTURE : PENCIL POINTS, *1946 February, pp. 87-91 :*
Daylighting for hospitals. Pt. 2, window design, glass.

ARCHITECTURAL REVIEW, *1946 February, pp. 43-8 :*
Oxted and Limpsfield " cottage " hospital, by H. E. and E. D. Mathews, for 22 general ward patients, 4-6 children and 6 private wards.

HOSPITAL AND HEALTH MANAGEMENT, *1946 March, pp. 90-3 :*
Mersey Docks medical service. First-aid and treatment centre, Victoria Docks. Described and illusd.

MODERN HOSPITAL (Chicago), *1946 February, pp. 46-54 :*
The modern health centre for regions of mild climate (e.g. Puerto Rico). Important research and design by Neutra made for U.S. Dept. of State. Design incs. depts. for Administration, Maternity and child welfare, Pediatrics, milk dispensary and nutrition, T.B., V.D. Detailed analysis of plan function.

ARCHITECTURE ILLUSTRATED, *1945 December, pp. 126-36 :*
Poole Joint Sanatorium, Middlesbrough, by W. and T. R. Milburn. Fully illusd. Incs. assembly hall with stage and seating for 414.

HOSPITAL AND HEALTH MANAGEMENT, *1946 February, pp. 50-3 :*
Fires and explosions in operating theatres: causes, prevention ; air-conditioning, electrical equipt. and earthing.

ARCHITEKTURA C.S.R. (Prague), *1945 No. 1, p. 23 :*
Project for maternity and gynæcological depts. in Kromeriz hospital.

HOSPITAL AND HEALTH MANAGEMENT, *1946 February, pp. 45-9 :*
"A nurses' home with a difference." Queen Charlotte's Maternity Hospl., by Hall & Easton and Robertson. Illusd., no plans.

HOSPITAL AND HEALTH MANAGEMENT, *1946 April, pp. 140-3 :*
Nurses' home for 50 students, by J. C. Goddeyne (from MODERN HOSPITAL).

BULLETIN TECHNIQUE DE LA SUISSE ROMANDE (Lausanne), *1941 August 9, pp. 181-7 :*
Competition for penitentiary, Rolle. Designs for large reformatory prison.

PUBLIC RESORT ; RECREATIVE

ARCHITECT AND ENGINEER (San Francisco), *1945 November, pp. 11-3 :*
Swimming pool design. Notes on construction by E. H. Wilder.

BULLETIN TECHNIQUE DE LA SUISSE ROMANDE (Lausanne), *1946 January 5, pp. 7-10 :*
Competition plans for a tourist centre, Montreux on shore of Lake Leman. Open-air theatre, restaurants, gardens, boating, etc.

BUILDER, *1946 February 15, pp. 160-2 :*
Central Hall, Westminster, reseated, etc., for United Nations Organisation by Ministry of Works.

AMERICAN CITY, *1945 December, pp. 100-1 :*
Open-air music auditoria. Projects described by H. C. Fischer, Secretary, Music Council of America. Illusd.

ARCHITECTS' JOURNAL, *1946 April 18, pp. 313-4 :*
"Reconstruction of our places of amusement." D.I.A. Lecture No. 5 on Design in Daily Life, by H. Sheppard.

BUILDING, *1946 February, pp. 42-7 ; March :*
"From circus to theatre—an evolution in entertainment. Conversion of large Frankfurt-on-Main circus to theatre seating 3,000, by R. Frankel. Equipment details in March No.

BUILDING, *1946 March, pp. 69-72 :*
Soviet theatre. Article by Sir Charles Reilly on Soviet Theatre Exhibition in London.

ARCHITECTURAL REVIEW, *1946 March, pp. 72-6 :*
Malmö, Sweden. Theatre, by Lallerstedt, Lewerentz and Hellden.

ARCHITECTURAL REVIEW, *1946 February, pp. 57- :*
Theatre at Utrecht, Holland, by W. M. Dudok.

BONYTT (Oslo), *1946 No. 1, pp. 14-5 :*
Cinema, Oslo, by Ore Bang, built 1940, seats 1,200.

BONYTT (Oslo), *1945 No. 9-10, pp. 110- :*
Community centres. Article by F. Rinnan, illusd. by examples from Europe and America.

ARCHITECTURAL FORUM, *1946 January, pp. 107-111 :*
War-time community centres, Bagley Downs, Vancouver, Washington, by P. Belluschi, and Pine Ford Acres, Pa., by George Howe and Louis I. Kahn. Former for 2,100 families, latter, 450 families, incs. child care centre.

BUILDER, *1946 March 22, pp. 282-6 :*
N.A.A.F.I. Services Club, Portsmouth, by Messrs. Joseph.

ARKHITEKTURA S.S.S.R. (Moscow), *1945 No. 10, pp. 18-21 :*
Childrens' gardens and clubs. Article by R. Smolenska, illustrating standard plans for rural clubhouses.

BYGGMÄSTAREN (Stockholm), *1946 No. 1, pp. 1-19 :*
Royal Gymnastic Central Institute, Stockholm. Buildings by G. Wejke and K. Odeen. Gym. halls, changing-rooms, library.

ARCHITEKTURA C.S.R. (Prague), *1945 No. 1 :*
Sports centre, project by Lev Krea for large centre inc. stadium, sports grounds for tennis, football, etc.

ARCHITECTURAL FORUM, *1946 February, p. 117 :*
Race track. Project for grandstand, clubhouse, etc., by Wolff & Phillips, for site nr. Portland, Oreg.

SCHWEIZERISCHE BAUZEITUNG (Zürich), *1946 January 5, pp. 8-11 :*
Fish-breeding station near Säfa on Zürichsee, by Max Kopp.

BYGMESTEREN (Copenhagen), *1946 March 23, pp. 43-50 :*
Rowing club houses. Various club and boat houses described with plans, etc.

PLAYING FIELDS JOURNAL, *1946 Jan.-March, pp. 60-4 :*
"Playing fields projected." Article by P. W. Smith. Grouping of facilities, sizes of grounds, orientation, economy in siting by overlapping pitches for summer and winter use.

BRIDGES

STRUCTURAL ENGINEER, *1946 April, pp. 201-22 :*
"The Demolition of Waterloo Temporary Bridge." Lecture by H. P. T. Lind to Inst. of Struct. Engs. and R.I.B.A. (illusd.).

ARCHITECTS' JOURNAL, *1946 February 7, pp. 123-6 :*
Conway : alternative proposals for the new bridge, by Evan Harrison, making possible retention of Telford's bridge (1826).

JNL., INSTITUTION OF CIVIL ENGINEERS, *1946 January, pp. 165-206 :*
Menai Bridge reconstruction. Paper by G. A. Maunsell, M.Inst.C.E., on 1940- reconstn. of Telford's bridge. Illusd.

SCHWEIZERISCHE BAUZEITUNG, *1946 March 23, pp. 139-46 :*
R.C. road bridge, Aynthia, Siam, by G. K. Kruck of Siam "ways department," Bangkok.

PROC., AMERICAN SOCIETY OF CIVIL ENGINEERS, *1946 January, pp. 5-68 :*
Brooklyn Bridge, New York. Historical features of constn. and operation, by H. R. Seely ; Design and stress condition, by O. H. Ammann ; Physical examination . . ., by N. Gray ; test of metals . . ., by H. E. Wessman. Illusd.

RELIGIOUS ; SEPULCHRAL

ARCHITECTURAL DESIGN AND CONSTRUCTION, *1946 March, pp. 77-80 :*
Community church : project for St. Helier's Estate, Morden, by E. D. Mills. Incs. community centre.

BUILDER, *1946 March 29, pp. 303-9 :*
The Crematorium. Note on 3rd Edn. Cremation in G.B., by Cremation Society. Illustrating exs. Enfield and Paisley.

EDUCATIONAL

BUILDER, *1946 January 18, pp. 72-3 :*
The planning of schools. Discussion meeting at Archl. Assn.

JNL., R.I.B.A., *1946 January, pp. 67-77 :*
School planning and construction, by C. G. Stillman. Paper to R.I.B.A. —only pubd. full report—with discussion and illusns.

LA MAISON (Brussels), *1945 August, pp. 147-150 :*
Schools. Analytical article by E. Parent, P. Fitschy, E. Klutz and A. Tibaux (Groupe l'Equerre), illusd.

ARCHITECTURE ILLUSTRATED, *1946 January, pp. 3-8 :*
Swedish schools by Ahrbom and Zimdahl ; at Stockholm, large 4-floor girls' sch. with assembly hall ; at Eriksdal, inc. also library.

SCHWEIZERISCHE BAUZEITUNG (Zürich), *1946 January 12, pp. 21-4 :*
Project for schools, Wetzikon and Pfaffikon, Zürich, by P. Hirzel.

OFFICIAL ARCHITECT, *1946 January, pp. 26-31 :*
"Area schools," Tasmania. School buildings adjusted to local requirements and curricula. Archt's. branch of P.W.D.

BUILDER, *1946 March 15, pp. 259-61 :*
School building : a system of permanent construction designed by H. V. Lobb for Herts C.C. Steel frame and ext. 11" cavity wall.

ARCHITECT AND BUILDING NEWS, *1946 April 12, pp. 23-5 :*
School construction : permanent or temporary. Schs. by H. V. Lobb [*F.*]. Steel frame, M.O.W. standard transverse concrete frame.

ARCHITECT AND BUILDING NEWS, *1946 February 15, pp. 97-8 ;*
BUILDER, *February 15, pp. 166-8 :*
The Government school building programme : R.I.B.A. disapproval of use of temporary huts to meet present need. Alternative proposal by H. V. Lobb.

JNL., R.I.B.A., *1946 February, pp. 131-3 :*
The use of standard hutting for schools. Memorandum from R.I.B.A. to Min. Education critical of Govt. policy.

ARCHITECTURAL RECORD, *1946 February :*
Eyes and ears in school. 1, Audio-visual classroom plg. 2, Light on growing children. 3, How daylighting was improved at Mexia, Texas. Detailed analysis of light and acoustic conditions with particular ref. to effect on child physique.

ARCHITECT AND BUILDING NEWS, *1946 January 18, pp. 40-4 :*
Public elementary schools, Belfast, by R. S. Wilshire, Edn. archt., Belfast : Carr's Glen and Grove schools.

ARCHITECTURAL FORUM, *1946 January, pp. 102-3 :*
Elementary school. Project by G. Stafford for City of Arcade, Calif., for gradual expansion from 225 to 800 pupils.

BUILDING, *1946 February, pp. 57-9 :*
The design of Nursery schools to-day. Article by Dr. Margaret Lowenfield.

ARCHITECTURAL REVIEW, *1946 April pp. 117-20 :*
Nursery school and crèche and pre-natal clinic, Ivrea, nr. Turin, by Figini and Pollini, built before war.

TECHNICAL SCHOOLS

BULLETIN TECHNIQUE DE LA SUISSE ROMANDE (Lausanne), *1945 June 9, pp. 153-62 :*
Cantonal agricultural school, Moudon. Competition designs large multi-storey bdg. inc. residential quarters, lecture rooms.

BUILDING AND ENGINEERING (Sydney, N.S.W.), *1946 February 25, pp. 18-21 :*
Wollongong technical college, N.S.W.

LABORATORIES

BYGGMÄSTAREN (Stockholm), *1945 No. 22, pp. 415-42 ; 23, pp. 443-58 :*
Laboratory buildings. Important synopsis of recent Swedish bdgs. Examples inc. research labs. for timber, coal products, iron and steel, medical-chemical and pharmaceutical, heating, agriculture, explosives, biochemical, textiles, concrete and cement. Well illusd.

BOUWKUNDIG WEEKBLAD (Amsterdam), *1946 March 26, pp. 64-8 :*
National wind tunnel and laboratory, Holland, by W. Van Tijen and H. A. Maaskaut.

BULLETIN TECHNIQUE DE LA SUISSE (Lausanne), *1942 August 8, pp. 181-7 ; August 22, pp. 193-201 :*
Laboratory for horological research at Neuchatel.

ARCHITECTURAL RECORD, *1945 November, pp. 82-115 :*
Industrial research laboratories. Important illusn. and description of Firestone Tire & Rubber Co. Research lab., Akron, by Voorhees, Walker, Foley and Smith. General Motors Technical Center project by Saarinen and Swanson. Hoffman-la Roche organic chemistry, pharmacology, chemo-therapy, biology, etc., lab., by Fellheimer and Wagner, Nutley, N.J. Johns Manville Corpn. Res. Centre for building materials, by Shreve, Lamb and Harmon, Bound Brook, N.J. Georgia Sch. of Technology, all purpose engineering lab. "Electronics Ark" for Genl. Electric Co., Syracuse, N.Y. Project for research centre. Time Saver Standards, lab. service piping.

ARCHITECTURAL FORUM, *1946 February, p. 10 :*
Johnson Wax Research and technical laboratory. Project by Frank Lloyd Wright. Illusd. by model.

(*To be continued*)

BOOK NOTES

The Bibiena Family, by A. Hyatt Mayor. 4to. 37 pp. + 49 plates. H. Bittner & Co. New York. 1945. $10.

REVIEWED BY RICHARD SOUTHERN

One puts A. Hyatt Mayor's *The Bibiena Family* (Bittner, New York, 1945) aside a little regretfully. To those who suppose that *Bibiena* was the name of a certain Italian scene-designer, the book reaffirms that there were six theatrical members of the Galli family (apart from straight painters and architects) who took that name, coming from four generations between 1625 and 1787. To those who know this already and seek to learn how to distinguish the work of the individuals, the book only says "Working often shoulder to shoulder, they not only drew very much alike, but must often have collaborated on the same drawing." Those who seek further and wish to distinguish those designs which have a relation to theatrical scenery from those which do not, will find little assistance : that puzzle remains. But for those whose aim is to understand such of the designs as seem certainly for scenery and to resolve them into their technical parts and discover their working, there is nothing at all.

There are 12 pp. of text discussing The Family, Their Manner of Working, Their Patrons, Their Audiences, and Their Age, and 9 pp. on The Court Theatres, Stage Machinery, Stage Scenery, The *Scena Per Angolo*, and Theatre Lighting, but in all these we seem to stay in front of the picture and never to adventure behind to inquire into the mystery of the workings.

The 53 plates—a little foggy—have their fascination, as indeed they must. There is reference to the *theatra sacra* and to the designs for catafalques. There is a technical page (but undiscussed) from Ferdinando's *L'Architettura Civile*, a pleasant little analysis of a *glory* from Dubreuil's *Perspective*, a photograph from Drottningholm and nine most interesting pictures of theatres—two drawings of Francesco's for the interior of The Opera House, Vienna, three first-rate studies for his auditorium in the Teatro Filarmonico at Verona, and four staggering photographs of the interior of Giuseppe's Opera House, Bayreuth—and the remainder are chiefly the typical Bibiean scene-pictures, mostly from America or Vienna.

All this is pleasant and welcome, but we find little new. Just how much, if at all, the Bibienas influenced typical professional theatre-work in Europe is not discussed. So far as the staging of continental opera went, their grand design may have found a home but what effect had their conceptions on the day-to-day drama of Drury Lane or the Little Theatre in the Haymarket? It seems that only in their technical stage-craft might they have helped the ordinary theatre, and this department of their work still awaits study. The material is there : some beginnings of analysis of their designs into the separate planes of scenery is possible, as suggested by a brief allusion to the Bibiena drawings in the Drummond Stewart Collection at the Library of the R.I.B.A., to be found in our JOURNAL for 10 August 1935 (article, *The Staging of Eighteenth-century Designs for Scenery*), and a fine drawing from that collection formed the frontispiece of JOURNAL, 2 April 1932. Mr. Hyatt Mayor's book, with its List of Works and Dates of the Bibienas, should go with the student in such an analysis—but the analysis has still to be made.

Civic and Memorial Lettering, by Percy J. Delf Smith, R.D.I. 4to. 48 pp. + 8 pl. A. & C. Black, London, 1946. 10s. 6d.

REVIEWED BY L. C. EVEETS, M.A.

The object of this book is to encourage the wider use of good lettering by civic authorities and craftsmen. To the former it offers guidance, and to the latter much useful information of a technical character. It contains many line-block illustrations and a small number of half-tone plates illustrating examples of lettering in various media produced at the Dorno workshop.

The author, very rightly, makes a strong plea to those responsible for lettering in our cities for sacrifice of some individuality of style for the sake of conformity and coherence. This is a most urgent matter, especially in the design of shop signs.

Into forty-six quarto pages the author has packed a considerable amount of advice and the results of a good deal of experience, but very little has been added, however, to what has already been said by such able exponents of the art of lettering as Edward Johnston and Eric Gill. The book might well have embodied a greater amount of pure and original research.

Spons' Practical Builders' Pocket Book. Edited by Clyde Young and Bernard Engel. 8th edition (1943). New impression. sm. 8vo. 571 pp. E. & F. Spon. 12s. 6d.

Spons' builders' pocket book remains one of the most used reference books of memoranda, tables and official rules and regulations. The current edition now reprinted was first published in 1943. Much of the information is now due for revision or at least presentation without so many embarrassingly anachronistic phrases as a reference to "The Board of Agriculture" leaflet on dryrot and none to the later and most important publications of the Forest Products Research Laboratory. There are no references to ply woods ; the notes on smoky chimneys make no reference to important Building Research Station work which has been published and is widely available.

Language of Vision, by Gyorgy Kepes, with introductory essays by S. Giedion and S. I. Hayakawa. 4to. 228 pp. Paul Theobald, Chicago. 1944. Robert Bruce Tague (School of Design, Chicago).

In *Language of Vision* Gyorgy Kepes traces the development of significant contemporary movements in painting, advertising art and photography in terms of physiological and psychological optics and of the contemporary man and his adjustment to the accelerated and confused world of to-day.

From an analysis of the action of lines, spots, planes and colour on the two dimensional picture plane, he proceeds to an explanation of the breakdown of conventional habits of vision, and the stages in the building up of the new organisation of plastic structure. This new spatial language has been made possible by the progressive liberation of plastic elements effected through the experiments of the impressionists, post-impressionists, cubists, futurists, purists, constructivists, surrealists and others, as well as by new advances of technology. Revolutionary movements in art, attempting to come to terms with a rapidly changing world, have seemed incomprehensible to the public. But, as Siegfried Giedion writes in his introduction : "We have to note the great care with which Gyorgy Kepes shows the contact of modern art with reality, and how paintings which, at first sight, seem remote from life, are extracted from its very bloodstream."

Kepes' evaluation of these new ways of seeing is a much needed clarification—a language and grammar of structure and plastic order in space-time—and the meaning of that language in its relationship to a contemporary social structure. To-day, according to Kepes, "creative artists have three tasks to accomplish if the language of vision is to be made a potent factor in reshaping our lives. They must learn and apply the laws of *plastic organisation* needed for the re-establishing of the created image on a healthy basis. They must make terms with con-

temporary spatial experiences to learn to utilise the *visual representation* of contemporary space-time events. Finally, they must release the reserves of creative imagination and organise them into dynamic idioms, that is, develop a contemporary *dynamic iconography*."

Language of Vision is excellently illustrated by much of the best work in contemporary painting and advertising art, as well as by work of the author's students at the Institute of Design. However, the significance of Kepes' excellent book lies in his attempt to integrate new æsthetic experiences with the world to which they relate. S. I. Hayakawa, in his foreword to the book, states it thus: "The reorganisation of our visual habits so that we perceive not isolated 'things' in 'space,' but structure, order, and the relatedness of events in space-time, is perhaps the most profound kind of revolution possible—a revolution that is long overdue not only in art, but in all our experience."

Incorporated Church Building Society. Annual report: 128th, for . . . 1945. 1946.

This issue contains an article, "The Damaged Churches," with illustrations; these prove to be results, not of bombing, but of pre-war neglect—fallen roof, cracked tower, and collapsing wall. These are taken as opportunity to stress the "stitch-in-time" principle and need for periodical overhaul, and to publicize the Society's pamphlet, "The Regular Inspection of Churches"; this is in the R.I.B.A. Library.

NOTES FROM THE MINUTES OF COUNCIL MEETINGS

MEETING HELD 25 JUNE, 1946

Honorary Associateship

The Secretary reported that Sir Geoffrey Whiskard, Permanent Secretary to the Ministry of Town and Country Planning, had accepted nomination as an Honorary Associate.

The Council have invited the Rev. C. B. Mortlock, M.A., F.S.A., Honorary Secretary of the London Diocesan Advisory Committee for the Care of Churches, a member of the Architectural Education Committee of London University and Chairman of its Board of Studies in Architecture, to accept nomination to the Honorary Associateship.

Honorary Corresponding Membership

The Secretary reported that nomination to the Honorary Corresponding Membership had been accepted by M. Pierre Vago (France), M. S. E. Rasmussen (Denmark), M. Wilhelm Lauritzen (Denmark), and M. B. E. Onat (Turkey).

The Council have invited Professor H. Russell Hitchcock, of Wesleyan University, Connecticut (U.S.A.), and M. Paul Tournon, Grand Prix de Rome, Architecte des Batiments Civils (France) to accept nomination as Honorary Corresponding Members.

Appointments

B.S.I. Technical Committee B/73: Symbols and Plans for Structural Steel and Concrete: Mr. George Fairweather [*F.*] and Mr. Percy J. Waldram [*L.*].

B.S.I. Technical Committee SF/21: Methods for Testing Atmospheric Pollution (including instruments): Mr. Percy J. Waldram [*L.*].

B.S.I. Conference on the Standardisation of Cinema Seats: Mr. J. Stanley Beard [*F.*].

London Council for the National Registration of Plumbers, Management Committee: Mr. A. F. Hooper [*F.*].

Technical Assistant Editor of the Journal and Secretary of the Architectural Science Board

The Council approved the creation of this new appointment to the staff of the Institute (details of which have been announced in the professional press).

United Nations Educational, Scientific and Cultural Organisation (UNESCO)

Approval was given for the acceptance of an invitation by the Ministry of Education that the R.I.B.A. should act as the National Co-operating Body for Architecture for the purposes of UNESCO. Under this arrangement the R.I.B.A. will:

(*a*) formulate advice on matters submitted to it on behalf of the United Kingdom delegates to UNESCO conferences;

(*b*) take the initiative, if it sees fit, in making recommendations for the consideration of the United Kingdom delegates;

(*c*) co-operate, in its special field, in making known and carrying out such projects as UNESCO might adopt.

Easements of Light and Rebuilding of War-Damaged Buildings

The Council approved a recommendation of the Practice Committee that the unsatisfactory position relating to private rights-of-light arising from Section 3 of the Prescription Act, 1832, should be brought to the notice of the Minister of Town and Country Planning, the Minister of Works, and all interested professional institutions, with a view to initiating remedial measures.

Festival of St. Luke

The Council agreed to make a contribution of £25 towards the cost of this Festival, which it is proposed to hold again in 1947.

Membership

The following members were elected:—

As Hon. Associate: 1. As Fellows: 15. As Associates: 19. As Licentiates: 18.

Election, 15 October 1946

Applications for election were approved as follows:—

As Fellows: 6. As Associates: 4. As Licentiates: 16.

Election, 12 November 1946

Two applications for election as Associates from overseas candidates were also approved.

Applications for Reinstatement

The following applications were approved:—

As Associate: William Vernon Coupland.

As Licentiates: Edward de Wilde Holding, Richard Aloysius Nunn, Khanderao Pandurang Thakur, Alexander Wilson.

Resignations

The following resignations were accepted with regret:—

Percy Kenneth Branson [*A.*].

Alfred Lingard [*L.*].

Applications for Transfer to Retired Members' Class under Bye-law 15

The following applications were approved:—

As Retired Fellow: George Morrison Hay.

As Retired Licentiate: John Morlais Evans.

Obituary

The Secretary reported with regret the death of the following members:—

Roy Charles Blampied [*F.*].
David Robertson Brown [*F.*].
George Thomas Caryer, O.B.E. [*F.*].
Douglas Crawford [*F.*].
Victor Thomas Jones [*F.*].
Frederick Herbert Mansford [*F.*].
Alfred Benjamin Scarlett [*F.*].
Charles Edwards Tebbs [*F.*].
Roger Basil Binyon [*A.*]. Killed on active service.
George Ernest Hedley [*A.*].
Alan Hew Hodgson [*A.*].
Ronald Hedley Matthews [*A.*].
Harry Anderson Paley [*A.*].
Mr. Paley was Grissell Gold Medallist in 1883.
Patrick Henry Dudgeon Ronaldson [*A.*].
Kenneth Rose [*A.*].
John Shorland Westcott [*A.*]. Killed on active service.
Frank Whitehead [*A.*].
Thomas Hubert Hardinge Vowles, J.P. [*Retd. A.*].
Thomas Sydney Athron [*L.*]. Killed on active service.
David J. Barry [*L.*].
Harold Dawson [*L.*].
Ivan Robert Milburn Dickinson [*L.*].
Horace Goulborn [*L.*].
William George Townsend Gray [*L.*].
Charles Stanley Mordaunt [*L.*].
John Morris-Williams [*L.*].
Stanley Hugo Newton [*L.*].
Andrew Victor Wilson, J.P. [*L.*].
Hugh William Ellis Ruffle [*Retd. L.*].
Thomas Hall (Ayr) [*Student*].

THE ANNUAL RECEPTION—1946

AMONG THOSE WHO ACCEPTED INVITATIONS WERE THE FOLLOWING:—

His Excellency the Polish Ambassador and Madame Strasburger, His Excellency the American Ambassador, His Excellency the Yugoslav Ambassador and Madame Leontic, the Commercial Counsellor for Belgium and Madame Antoine de Clercq, Mr. Krotov, Consul of the Soviet Union in London; Mr. Tan Pao-shen, Consul-General for China; His Excellency the Spanish Ambassador and Madame de las Barcenas, the Swiss Minister and Madame Ruegger, the Consul-General for the Netherlands, the Dominican Minister and Madame Pastoriza.

Mr. J. L. Murphy, Trade Commissioner for Newfoundland; Mr. Frederick Hudd, High Commissioner for Canada; Mr. John Dulanty, High Commissioner for Eire; the Rt. Hon. George Hall, M.P., Secretary of State for the Colonies; the Rt. Hon. J. Chuter Ede, M.P., Home Secretary, and Mrs. Ede; the Rt. Hon. Lord Latham, J.P., Leader of the London County Council; the Rt. Hon. Lord Kennet, P.C., G.B.E., D.S.O., D.S.C., and Lady Kennet; the Rt. Hon. Lord Goddard, Lord Chief Justice of England, and Mrs. Schuster; the Rt. Hon. Viscount Trenchard, G.C.B., G.C.V.O., D.S.O., and Viscountess Trenchard; the Rt. Hon. Lord Moran and Lady Moran, the Rt. Hon. Lord Ammon, P.C., J.P., Captain of the Gentlemen at Arms; the Rt. Hon. the Earl of Listowel, Postmaster-General; the Rt. Hon. Lord Courtauld-Thomson, K.B.E., C.B.; the Rt. Hon. Viscount Kemsley and Viscountess Kemsley; the Rt. Hon. Lord Strabolgi; Sir Hartley Shawcross, K.C., M.P., Attorney-General; the Rt. Hon. Viscount Esher; the Rt. Hon. Lord Amulree; the Rt. Hon. Lord Courthope, P.C., M.C., and Lady Courthope; General Sir Ronald F. Adam, K.C.B., D.S.O., Chairman of the British Council, and Lady Adam; the Rt. Hon. George Tomlinson, M.P., Minister of Works, and Mrs. Tomlinson; the Rt. Hon. Viscount Ridley, C.B.E.; the Most Hon. the Marquess of Londonderry, K.G., P.C.; the Rt. Hon. Lord Winster, M.P., Minister of Civil Aviation; the Rt. Hon. Lord Rennell and Lady Rennell; Vice-Admiral Oliver Bevir, C.B., C.B.E., Secretary, National Trust, and Mrs. Bevir.

Mr. Henry Strauss, M.P., and Mrs. Strauss, Sir John Wrigley, K.B.E., C.B., Deputy Secretary, Ministry of Health, and Lady Wrigley; Sir Godfrey Ince, K.C.B., K.B.E., Secretary to the Ministry of Labour and National Service, and Lady Ince; Sir William Douglas, K.C.B., K.B.E., Secretary to the Ministry of Health, and Lady Douglas; the Rt. Hon. Lord Nathan, Parliamentary Under-Secretary to the War Office, and Lady Nathan; Sir Wavell Wakefield, M.P., and Lady Wakefield, Mr. Henry Berry, M.P., and lady, Mr. Clement Davies, K.C., M.P., Canon J. A. Douglas, D.D., Ph.D., Chairman of Convocation, University of London; Sir Frank Soskice, K.C., M.P., Solicitor-General, and lady; Mr. Thomas Braddock, M.P., Mr. Hugh Linstead, M.P., and Mrs. Linstead, Mr. Alfred Bossom, M.P., Sir Allan Powell, G.B.E., D.L., Chairman of the B.B.C.; Sir Cyril Hurcomb, G.C.B., K.B.E., Secretary, Ministry of Transport; Sir Philip and Lady Warter, Sir Robert Fraser, K.B.E., C.B., Secretary War Damage Commission, and Lady Fraser; the Rt. Rev. the Dean of Westminster, Sir Geoffrey Whiskard, K.C.B., K.C.M.G., Secretary, Ministry of Town and Country Planning; Mr. C. N. Shawcross, M.P., and Mrs. Shawcross, Sir Eric Speed, K.C.B., K.B.E., M.C., Permanent Under-Secretary of State for War, and Lady Speed.

Sir Kenneth Barnes, M.A., Principal, Royal Academy of Dramatic Art; Sir Richard and Lady Paget, Sir Percival Robinson, K.C.B., and Lady Robinson, Sir Eric de Normann, C.B., Deputy Secretary, Ministry of Works; the Rt. Hon. Arthur Greenwood, C.H., M.P., Lord Privy Seal, and Mrs. Greenwood; Sir Jonah Walker-Smith, Sir Ian and Lady MacAlister, the Rt. Hon. Sir Arthur Salter, G.B.E., K.C.B., and Lady Salter; Lieut.-Col. Sir Thomas Moore, C.B.E., M.P., Mr. George Hicks, M.P., and Mrs. Hicks, Sir Eustace Pulbrook, Chairman of Lloyd's; Sir Harold and Lady Bellman, Major-General the Rt. Hon. Sir Frederick Sykes, G.B.E., G.C.S.I., G.C.I.E., and Lady Sykes, Sir Walter Lamb, K.C.V.O., M.A., Secretary, The Royal Academy, and Mrs. Lamb; the Hon. Sir Herbert Wallington, K.C., the Treasurer, Gray's Inn, and Lady Wallington; Sir Gerald Kelly, R.A., Sir Edward Mellanby, F.R.S., F.R.C.P., Secretary, Medical Research Council, and Lady Mellanby; Mr. Ivor Thomas, M.P., Parliamentary Secretary to the Minister of Civil Aviation, and Mrs. Thomas; Sir Alan Barlow, K.C.B., K.B.E., and Lady Barlow, Sir Charles Doughty, K.C., Chairman, General Council to the Bar, and Lady Doughty; Sir Frank Newson-Smith, Bt., President, London Chamber of Commerce; Mons. B. Karavaev, First Secretary, U.S.S.R. Embassy, and Madame Karavaev; the Rt. Hon. William Whiteley, M.P., Parliamentary Secretary to the Treasury; Sir Bertrand Watson, Chief Metropolitan Magistrate, and Lady Watson; Sir Hugh Foster, President of the Law Society.

Mr. J. L. Musgrave, M.I.C.E., President Federation of Associations of Specialists and Sub-Contractors; Mr. J. S. Dow, Hon. Secretary, Illuminating Engineering Society; Mr. P. H. Brind, Principal Assistant Secretary, Ministry of Labour and National Service, and Mrs. Brind; Dr. J. H. Harley-Williams, Secretary-General, National Association for the Prevention of Tuberculosis, and Mrs. Harley-Williams; Mr. R. V. Southwell, M.A., LL.D., F.R.S., Rector of the Imperial College of Science and Technology, and Mrs. Southwell; Mr. E. W. Garrett, President London Master Builders' Association, and Mrs. Garrett; Professor D. Hughes Parry, LL.M., M.A., Vice-Chancellor, University of London, and Mrs. Hughes Parry; Mr. Harold Claughton, C.B.E., M.A., Principal, University of London; Councillor E. H. Keeling, M.C., J.P., M.P., Mayor of Westminster, and Mrs. Keeling, Mayoress; Alderman C. S. Steel, F.C.A., J.P., Mayor of St. Marylebone, and Mrs. Steel, Mayoress; Professor V. H. Blackman, Sc.D., F.R.S., Chairman, Forest Products Research Board, and Mrs. Blackman; Mr. W. H. Forsdike, President, N.F.B.T.E., and Mrs. Forsdike: Mr. E. Holroyd Pearce, K.C., Master of the Skinners' Company, and Mrs. Pearce; Major-General K. C. Appleyard, C.B.E., T.D., Ministry of Works; Alderman and Sheriff F. M. Wills, Sheriff of the City of London; Mr. Sheriff F. Tidbury Beer, Sheriff of the City of London, and Mrs. Tidbury Beer; Professor Hamilton Thompson, C.B.E., M.A., Hon. D.Litt., F.B.A., F.S.A.; Mr. B. H. St. J. O'Neil, M.A., F.S.A., Chief Inspector of Ancient Monuments, and Mrs. O'Neil; Alderman B. H. Rockman, J.P., Chairman of the Middlesex County Council, and Mrs. Rockman; Dr. C. E. M. Joad.

Dr. T. J. Drakeley, Principal the Northern Polytechnic; Mr. A. Creech Jones, M.P., Parliamentary Under-Secretary to the Colonial Office, and Mrs. Creech Jones; Alderman Wilfred E. Mullen, O.B.E., J.P., Mayor of Holborn, and Mrs. Mullen; Mr. E. Furnival Jones, President of the Institute of Chartered Accountants, and Mrs. Jones; Sir Alfred Webb-Johnson, Bt., K.C.V.O., O.B.E., D.S.O., T.D., President of the Royal College of Surgeons, and Lady Webb-Johnson; Mr. W. F. Grimes, Keeper of the London Museum; Mr. W. J. Rudderham, Secretary, London Master Builders' Association; Mr. Frank Rye, Deputy Chairman, London County Council; Mr. A. G. Harfield, President, Royal Institution of Chartered Surveyors, and Mrs. Harfield; Brigadier F. Higginson, C.M.G., Controller and Director of Works, Imperial War Graves Commission, and Mrs. Higginson; Mr. and Mrs. I. G. Evans, Mr. H. S. Souttar, C.B.E., M.Ch., F.R.C.S., President, British Medical Association, and Mrs. Souttar; Mr. Russell J. Storey, President, Auctioneers' and Estate Agents' Institute, and Mrs. Storey; Lieut.-Col. Sir Cuthbert Whitaker, F.S.A., Chairman of the Special Committee of the Corporation of London, and Lady Whitaker; Mr. Kenneth Campbell, President, Association of Building Technicians, and Mrs. Campbell; Mr. Charles Wheeler, R.A., President, Royal Society of British Sculptors; Mr. Joseph Stephenson, O.B.E., President of the Chartered Institute of Secretaries, and Mrs. Stephenson; Mr. W. Prescott, Director of the Federation of Associations of Specialists and Sub-Contractors; Alderman Chas. R. Gill, M.B.E., J.P., President, National Housing and Town Planning Council; Mr. H. C. Weston, President of the Illuminating Engineering Society, and Mrs. Weston; Mr. H. B. Bryant, Secretary, Building Industries National Council; Mr. Pembroke Wicks, C.B.E., LL.B., Registrar, Architects' Registration Council; Commissioner and Mrs. Edgar Dibden (Salvation Army); Professor H. John Collins, President, Institution of Structural Engineers; Mr. F. J. Boyd, Mr. George A. Greenwood, Mr. H. E. Powell, Mr. Donald Boyd, Major J. A. Gannon, Mr. Stanley Baron, Col. F. N. Falkner, Major A. A. Longden (British Council) and Mrs. Longden; Mr. N. W. Jenson, F.C.I.S., Secretary, Institution of Highway Engineers, and Mrs. Jenson; Miss E. Caldicott, Miss Margaret Taylor and friend, Miss B. Solly, Secretary, Architects' Benevolent Society, and friend; Mr. D. A. G. Reid, Principal Brixton School of Building, and Mrs. Reid; Col. C. M. Croft, D.L., J.P., representing the Institution of Gas Engineers; Mr. John Summerson, F.S.A., Curator, Sir John Soane's Museum; Mr. A. Bruce Roberts, Ministry of Education; Mr. Hanslip Fletcher, Professor J. D. Bernal, Mr. G. R. Dawbarn, President, Architectural Association; the Rt. Hon. P. J. Noel-Baker, M.P., and Mrs. Noel-Baker, Mr. F. R. Yerbury.

CORRESPONDENCE

Cologne To-Day

To the Editor, JOURNAL R.I.B.A.

DEAR SIR,—I have just spent a short leave in Cologne in an endeavour to see for myself something of the devastation in one of the worst shattered cities in Europe.

One's first impression is that the bombing only finished a fortnight ago. The task of clearing away the rubble is immense. Miniature railways have been temporarily laid down in some areas, but even the result of nearly 12 months' work makes but little impression upon the areas of devastation. In the neighbourhood of the cathedral you can still walk through streets and streets of wreckage, with débris piled high on either side of the 3 ft. pathway, which was once a road.

The cathedral itself bears the scars of its 16 bombs, which have done much damage to the ornamental stonework, but which do not seem to have affected the stability of the structure. The roofing has suffered badly, and the vaulting in the nave and transepts has in some places completely collapsed.

Although one realises that at home there are still terrific problems of reconstruction yet to be solved, one does hope that architects will not be so engrossed in their work that they will have no time to consider how best they can help these devastated cities.

I would like to feel that if, under present circumstances, it is not yet possible to offer any material help towards the solution of this problem, the profession at home (students' section included) is doing its best to become acquainted with the conditions over here. We must not close our eyes to what is surely one of the greatest tragedies in the whole history of architecture. This letter is not written as an appeal specifically for the cities of Germany, but for the many cities all over the continent, whose architecture has literally been reduced to dust.

Yours faithfully,

IAN H. ABBOTT,
Student, Birmingham School of Architecture, 1939-41.

Editor's Note.

By a coincidence the article published on pages 411-13 of this number of the JOURNAL was in preparation when Mr. Abbott's letter arrived. His plea that the restoration of the war-ravaged cities of Europe should be of concern to British architects agrees to some extent with the views expressed by Mr. Arthur J. Davis in his letter published in the May JOURNAL. But it is interesting to note in the Cologne article that while an æsthetic controversy is raging in the city council and press, Military Government is getting on with the task of rehabilitating the services of the city and providing temporary housing. The main point surely is that continental cities must be rebuilt to prevent chaos in Europe, and both Mr. Davis and Mr. Abbott urge that British architectural skill should be used. It would be tragic if these basic facts were overlooked in an argument on æsthetics. The residential, industrial and commercial premises can only be rebuilt as contemporary structures; partly damaged historic buildings should be repaired, and here Mr. Davis is right in saying that men trained in such repair work and sympathetic to it are necessary. Everyone will agree that to give a modern structure a fake-antique veneer is a crime—a crime to which the sentimental German race is addicted (in spite of Gropius). This perhaps indicates the part to be played by British architects in the re-education of Germany.

Restoration of Historic Buildings

To the Editor, JOURNAL R.I.B.A.

SIR,—The fallacy that underlies Mr. Wylson's reasoning in his letter in your last issue is that he assumes that contemporary forms of art are living and that past forms are dead. This projection of the idea of mortality from living organisms to creations of the intellectual and æsthetic spheres is wholly unwarranted. Shakespeare's works are not dead, they are alive as long as we need and use them. If we quote him because he has given exactly that form of expression to a thought which we require to-day, we do not imitate him. His words are more "alive" than masses of contemporary verbiage. It is time we recognised that the date at which a building is erected has no importance compared with the measure of its power to express the aspirations of men and women living to-day. To assert that "the æsthetic thought behind any contemporary architecture arises from the spirit of the times," if the definition of that spirit is meant to exclude what it derives from our inheritance, is to limit contemporary design to express and satisfy only a minute portion of our consciousness and of our current needs. We are not children of to-day alone but of the whole of civilisation and we cannot, if we would, divest ourselves of the appetites born of our historical make-up.

To express in art only the things which are novel in our experience and which belong exclusively to our age is to put the clock back and act as if we were at the beginning of civilisation, unpossessed as yet of any historical background. The whole history of the renaissance is a refutation of Mr. Wylson's dictum that art has always been contemporary, and however much the idea may be resented, our own culture is still that of Greece and Rome.

Yours, etc.,
WALTER H. GODFREY [*F.*]

Thornham Villa,
Camden Crescent, Camden Road,
Bath, Somerset.
7th July, 1946.

The Editor, JOURNAL, R.I.B.A.

SIR,—Mr. DuncanWylson's reply to the letter of Mr. Arthur J. Davis in the May issue does seem to rely wholly on the contention that nowadays there really is a "contemporary architecture." I recollect that, some 45 years ago, the devotees of "L'Art Nouveau" claimed such term for their output—which was no more representative of general taste than is Modernism to-day, in spite of a lot of advertising.

Our forefathers may have restored buildings in the manner familiar to their own times (sometimes they did not—*vide* Dance and Wren), but, in so doing, they did at least draw upon forms distilled by hundreds of years of human experience, and obeying æsthetic laws. Modernism (be it whispered) may be only a form of transitory exhibitionism, as was L'Art Nouveau, and its only apparent law is the purely negative one of "Don't do what Daddy did," just as the guiding principle of L'Art Nouveau seemed to be "No straight lines anywhere"

Inspiring art cannot be built up out of negatives and the restoration of a Wren building in the graceless manner of Modernism would no more bear contemplation than would its "adornment" with the mass of wobbles and wriggles which L'Art Nouveau would have employed. Better stick to the devil we know. We are now in an unfortunate age—not a surge of the human spirit—and, when we get on an even keel again, retrospect will give a tinge of the ridiculous to many things which seemed "a bright idea at the time."

In the meantime, and until beautiful form can again be appreciated without dragging in a mass of contention about its political or ideological background, better leave off teaching for a bit. Art would be better served thereby.

I am, Sir,
Yours faithfully,
PHILIP C. HARRIS [*F.*]

Voting for the Council by Overseas Members

To the Editor, JOURNAL R.I.B.A.

DEAR SIR,—Last year in company with several other Service members I had occasion to voice a protest against the fact that members serving abroad had no opportunity to vote in the election of the Council.

Once again this has happened, voting papers posted in Hertford on 11 June were re-directed from my home address in London and reached Basra, Iraq, on 17 June, in quick time. However, the completed papers had to be returned to the R.I.B.A. by the 18th, that is one week after dispatch.

In view of the unsatisfactory reply given last year, this letter is written in the hope an explanation will be given and that home members will see how members serving overseas are debarred from the right to vote.

Yours faithfully,
JAMES C. KENNEDY [*A.*].

Editor's Note.—The elections are conducted according to the bye-laws of the Royal Institute. Bye-law 35 reads: "The voting list shall be issued to all members in the United Kingdom or the Irish Free State, entitled to vote therein, not less than ten days after the report of the proceedings at the Annual General Meeting and the discussion of the Annual Report has been published in the JOURNAL." It will be noted that members whose addresses are registered at the R.I.B.A. as outside the United Kingdom or the Irish Free State do not receive voting papers. The Institute obviously has no control over the forwarding of a member's voting papers from his home address. Therefore if a member is overseas he cannot expect to exercise a vote in the Council election. The elections would be unworkable if members all over the world were entitled to record votes.

NOTES AND NOTICES

MEMBERS SERVING WITH THE FORCES

KILLED

HARTLEY : PAUL H. [*S.*], F/Sgt. R.A.F.
WESTCOTT : JOHN S. [*A.*], Lieut. R.E.

DECORATIONS AND DISTINCTIONS

ATKINSON : W. W. [*A.*], Sqdn. Ldr. R.A.F.V.R. Awarded O.B.E. and Mentioned in Despatches.
HOWRIE : R. J. [*A.*], Major R.E. Awarded M.B.E.
KILNER : D. S. [*A.*], Capt. R.E. Mentioned in Despatches.

R.I.A.S. Annual Convention, 1946

The first post-war convention of the Royal Incorporation of Architects in Scotland was held at Inverness on Friday and Saturday, 14-15 June. Although the number of visitors was not up to the pre-war figures, great credit was due to the Inverness President, Mr. W. J. Taylor, and his committee for the very successful organisation.

The formal proceedings opened on Friday afternoon with the annual general meeting in the Town Hall, at which Mr. T. C. Howitt, vice-president R.I.B.A., and Mr. C. D. Spragg, secretary R.I.B.A., were present. Mr. A. Graham Henderson, A.R.S.A., was elected President, and Messrs. James Wood, G. Steel and Lockhart W. Hutson were elected Incorporation representatives.

In the course of his remarks to members, in submitting the annual report, the President said the Council was determined to emphasise the need of office training of the architect because that was not only in his interests but because offices could not be otherwise staffed. He also referred to the manner in which building was being delayed through time spent on completing numerous forms. He expressed satisfaction on the resuscitation of the Quarterly as a means of publishing information to members.

On the unanimous recommendation of the Council, Honorary Fellowship was awarded to Mr. William MacLean, solicitor, of Glasgow, in respect of his services to the profession over many years. It was agreed that the next annual convention should be held within the area of the Stirling Chapter. After the meeting, members of the Conference and their guests were welcomed by the Provost and Magistrates of Inverness and entertained to tea.

Some ninety members and guests sat down to dinner in the ballroom of the Caledonian Hotel under the chairmanship of the President. After the loyal toast and that of the Founder had been honoured, Major Robert Smith, past chairman of the Royal Institution of Chartered Surveyors, Scottish Branch, proposed "The Town and Trade of Inverness." The toast of "The Architectural Profession" was proposed by Mr. John MacBain. Mr. T. C. Howitt replied, expressing regret that Sir Percy Thomas was not able to be present but said he sent his good wishes. The President also replied. The health of the guests was proposed by Mr. Leslie Grahame-Thomson and replied to by the Rev. Mr. William Graham. During the intervals between speeches and at the close of the dinner dancing took place—an innovation which it is believed might well be repeated at future R.I.A.S. dinners.

An early start on the tour was made next morning. The first stop was at Beauly Priory, which is under the charge of the Ministry of Works. Thereafter the route traversed the beautiful scenery of the Pass of Druim, through Glen Cannich and Drumnadrochit to Urquhart Castle, also under the charge of the Ministry of Works. Lunch was provided at Drumnadrochit Hotel by the Inverness Architectural Association. At the close of this, Mr. Spragg, on behalf of those who attended the Conference, expressed a vote of thanks to Mr. Taylor and his committee. The return journey was made along Loch Ness.

Franco-British Union of Architects

It is hoped to resume the annual meetings of the Franco-British Union of Architects in the near future. The Committee of the British Section has received an invitation from the Hon. Secretary of the French Section to hold the annual general meeting at Rouen, in France, in September next. This invitation has been cordially accepted by the British Section and full details will be sent to all members who intimate their intention of accepting the invitation together with an approximate estimate of cost.

The meeting, which will include excursions to places of interest in Normandy, will be held from 20 to 24 September next and owing to existing circumstances will be for a limited number of members and their wives, but it will not be possible to arrange accommodation for more than about twenty-five persons. Early application is essential and members who wish to attend the meeting are asked to write as soon as possible to the Hon. Secretary-General, Lieut.-Col. H. L. Cart de Lafontaine [*F.*], 3 Lisson Grove, London, N.W.1.

Northants, Beds. and Hunts. A.A. Annual Meeting

The annual general meeting of the Northants, Beds. and Hunts. Association of Architects was held on Wednesday, 5 June 1946 at the "Swan" Hotel, Bedford. The President, Mr. W. R. Steel [*F.*], of Luton, was re-elected president for a further session and was warmly thanked for his services to the Association.

In his presidential address Mr. Steel extended a hearty welcome home to members who had returned from H.M. Forces. He referred to the difficult times which lay ahead, but gave a strong pointer to younger architects, who, he said, had everything to anticipate and prepare for. He also paid tribute to the work of the Council of the R.I.B.A., who are doing excellent work, and appealed to the support of all members both to the R.I.B.A. and the Association.

The report of the Council for the past session and the statement of accounts for the year ended 31 December 1945 were presented by the Hon. Secretary and approved.

The following officers were elected :—President, W. R. Steel [*F.*], Luton ; vice-presidents, P. J. J. Panter [*F.*], Wellingborough ; H. A. Harris [*L.*], Bedford ; Council, F. H. Allen [*F.*], Northampton ; F. A. Coles [*L.*], Long Buckby ; C. Croft [*L.*], Northampton ; B. C. Deacon [*F.*], Luton, Bedford ; S. V. Goodman [*L.*], Bedford ; W. A. Lea [*F.*], Huntingdon ; F. C. Levitt [*L.*], Biggleswade, Beds. ; E. J. Storry [*A.*], Kettering ; H. F. Traylen [*F.*], Stamford. Hon. secretary and treasurer, P. G. Copson [*L.*], 35 St. Matthew's Parade, Northampton. Hon. auditor, W. Rosser [*F.*].

International Housing Exhibition at Brussels

The attention of members is drawn to the International Housing Exhibition organised by the Institut National du Logement et de l'Habitation in Brussels, open May to September 1946. The Executive Committee of the exhibition will be glad to give every assistance to members of the R.I.B.A. calling at the administrative offices at the exhibition.

Cessation of Membership

Under the provisions of Bye-law 21 the following has ceased to be a member of the R.I.B.A. : As Fellow, Bertrand James Waterhouse.

Leverhulme Scholarship in Architecture

The Leverhulme Scholarship tenable at the Architectural Association School of Architecture, value £1,000, which includes payment of fees and maintenance for a period of five years, has been awarded to Mr. Lyndon G. Harris (Halesowen, Worcs.). Special Mentions were awarded to Mr. J. A. Holderness (Watford, Herts) and Mr. P. J. Lord (Welwyn Garden City, Herts), and Mentions to Miss D. R. Leigh (Edgware, Middlesex) and to Mr. T. Davies (Whitstable, Kent).

Government Travelling Exhibitions

A small travelling exhibition entitled "Design of Houses" is being toured among housing authorities by the Ministry of Health. It has been planned to explain to the general public the main recommendations made in the Housing Manual 1944 on design, layout and space standards.

The exhibition consists of four cases which can be opened up to display models and supporting photographs. The subjects are a kitchen-living room house, a working kitchen house, a dining-kitchen house and a bedroom floor. Six sets are available for loan and the Ministry suggests they be used as a background to a local exhibition of models, plans or sketches being built by the authority.

The Ministry of Information has designed and is circulating a set of eight screens, worked out by the Ministry of Town and Country Planning. Like the Ministry of Health exhibition these screens are intended to supplement local planning exhibitions and to educate the public on the advantages of town and country planning. The subjects are : "Why we must plan our land," "So much to be done in so little space," "What planless development did to the towns," "What planless development did to the country," "We have the resources and the skill ; we have the tradition and the opportunity," "One of the tasks (a typical blitzed town) and one of the projects," "Where men and women have planned," and a supplementary screen.

Journal Drawings

The illustrations to the report of the Lectures on Office Organisation in the June JOURNAL were by Mr. John D. Cordwell (Student) and Mr. W. F. Mullins (Student). This should have been stated at the foot of the report.

The University of Liverpool—Liverpool School of Architecture

Applications are invited for two full-time posts of Ungraded Lecturer and Studio Instructor in the School of Architecture, at a salary of £450-£600 per annum, according to qualifications and experience, together with a child allowance.

Applications, accompanied, if possible, by drawings or photographs of work, two testimonials, and the names of two referees, should be received not later than 31 August, 1946, by Stanley Dumbell, Registrar, from whom further particulars may be obtained.

City of Leeds Education Department

Applications are invited for the undermentioned posts in the Leeds School of Architecture. Candidates should preferably have been trained in a recognised school of architecture and be Associates of the R.I.B.A.

1. Full-time Lecturer and Studio Instructor in Architectural Design and Construction. Special qualifications in Advanced Building Construction, Steel and Reinforced Concrete and/or Acoustics will be an additional recommendation.
2. Lecturers and Studio Instructors in Architecture. *Four* positions are vacant and candidates will be required to lecture in subjects to be arranged and to instruct in the Studios.

Salary in accordance with the new Burnham salary scales, with allowance for professional experience.

Application forms, which should be returned as soon as possible, may be obtained by sending stamped addressed foolscap envelope to the Director of Education, Education Offices, Leeds, 1.

County Borough of Londonderry

APPOINTMENT OF TOWN PLANNING ASSISTANT

Applications are invited for the post of Planning Assistant, at a salary of £400 per year, plus War Bonus on Whitley Scale, which is at present £59 16s. per annum. The probable duration of the work will be two to three years, and the post, which will be temporary, will be terminable by three months' notice, in writing, on either side.

Candidates must be Associates of the R.I.B.A., preference being given to those with some experience in Statutory Planning Schemes, or to those who are studying or intending to study for the Town Planning Examination.

Selected candidates may be required to attend for interview for which vouched travelling expenses will be paid.

Preference will be given to ex-Service candidates possessing the required qualifications, provided that the Council is satisfied that such candidates can, or within a reasonable time will be able to, fill the post efficiently.

Age of candidates not to exceed 35 years of age, or in the case of ex-service men 40 years of age.

Applications, in writing, giving full particulars of age, qualifications and experience, accompanied by two recent testimonials, and details of service in H.M. Forces, if any, will be received by the Town Clerk, Guildhall, Londonderry, in an envelope marked "Planning Assistant" not later than 20 July 1946.

Kingston-upon-Hull Education Authority

COLLEGE OF ART AND CRAFTS, KINGSTON UPON HULL SCHOOL OF ARCHITECTURE

Required, to commence duty as soon as possible, a full-time Lecturer and Studio Instructor. Applicants should be members of the R.I.B.A., preferably with the Degree or Diploma of a recognised School of Architecture. Previous experience in lecturing on architectural subjects, or professional practical experience, desirable. Salary in accordance with the Burnham Scale. In fixing the initial salary, account will be taken of time previously spent in teaching and in professional practice. Particulars of appointment, and application forms (which must be returned within fourteen days of the date of this issue) can be obtained on receipt of a stamped, addressed, foolscap envelope, from the Director of Education, Education Offices, Guildhall, Kingston-upon-Hull.

County Borough of Southend-on-Sea Education Committee

MUNICIPAL COLLEGE

Principal: P. F. R. VENABLES, Ph.D., B.Sc., F.R.I.C.

DEPARTMENT OF ARCHITECTURE AND BUILDING

(which is recognised for exemption from the R.I.B.A. Intermediate Examinations).

Head of Department: NORMAN KEEP [*F.*]

Applications are invited for the following, to commence duties as from September 1946:—

Lecturer in Architecture. Design and History of Architecture.

Lecturer in Building Construction and Allied Subjects. A.R.I.B.A. and/or A.M.I.Struct. and/or A.M.Inst.C.E. or equivalent.

Salary will be in accordance with the Burnham Technical Scale. Forms of application and fuller details of the posts may be obtained from H. Boyes Watson, Chief Education Officer, Education Office, Warrior Square, Southend-on-Sea, on receipt of a stamped addressed foolscap envelope, and should be returned to the Principal as soon as possible.

Northern Polytechnic, Holloway, N.7

In addition to the vacant posts notified in the June JOURNAL an appointment is also vacant for a Senior Assistant to be responsible for the teaching of Building Construction and related subjects. The teacher will be expected to have first-class professional experience and to have specialised in constructional matters. The salary will be £636 to £798. Applications should be made to R. H. Currell, Esq., Secretary.

R.I.B.A. Building Surveyor Examination

At the R.I.B.A. Examination for the office of Building Surveyor under Local Authorities held on 1, 2 and 3 May 1946, three candidates presented themselves and the following were successful:—Mr. Ernest C. Ashwell, Mr. Jack Wood.

Dates of the Forthcoming R.I.B.A. Examinations

Intermediate Examination

NOVEMBER 8, 9, 11, 12, and 14, 1946.
Last day for receiving applications: September 23rd, 1946.
MAY 16, 17, 19, 20, and 22, 1947.
Last day for receiving applications: March 20, 1947.
NOVEMBER 7, 8, 10, 11, and 13, 1947.
Last day for receiving applications: September 19, 1947.

Final and Special Final Examination

DECEMBER 4, 5, 6, 7, 9, 10, and 12, 1946.
Last day for receiving applications: October 23, 1946.
JULY 2, 3, 4, 5, 7, 8, and 10, 1947.
Last day for receiving applications: May 21, 1947.
DECEMBER 3, 4, 5, 6, 8, 9, and 11, 1947.
Last day for receiving applications: October 15, 1947.

Examination of Licentiates to qualify for Candidature as Fellows

DECEMBER 4, 5, 6, 7, and 9, 1946.
Last day for receiving applications: October 10, 1946.
JULY 2, 3, 4, 5, and 7, 1947.
Last day for receiving applications: May 7, 1947.
DECEMBER 3, 4, 5, 6, and 8, 1947.
Last day for receiving applications: October 1, 1947.

Examination for Building Surveyors

OCTOBER 9, 10, and 11, 1946
Last day for receiving applications: August 28, 1946.
MAY 7, 8, and 9, 1947.
Last day for receiving applications: March 19, 1947.
OCTOBER 8, 9, and 10, 1947.
Last day for receiving applications: August 27, 1947.

Competitions

HOUSING, NETHER LIBERTON, EDINBURGH

Edinburgh Corporation invite architects of British nationality resident in Great Britain to submit designs for the development of a housing estate at The Inch, Nether Liberton, Edinburgh.

Assessor: Mr. George D. Macniven [*F.*].

Premiums: £500. £300 in respect of other designs according to merit.

Last day for submitting designs: 7 September 1946.

Conditions of the competition may be obtained on application to Mr. J. Storrar, Town Clerk, City Chambers, Edinburgh, 1.

Deposit: Two guineas.

COMPETITION FOR PLANNING OF THE HAYLING BEACHLANDS

The Urban District Council of Havant and Waterloo invite the submission of designs from competitors with suitable professional qualifications for the laying out of part of an area known as the Hayling Beachlands with a view to the improvement of its amenities.

Assessor: Dr. H. V. Lanchester, Litt.D., M.T.P.I. [*F.*].

Premiums: £200, £100, £50.

Last day for submitting designs: 30 September 1946.

Conditions of the competition may be obtained on application to Albert E. Madgwick, Esq., Clerk of the Council, Town Hall, Havant.

Deposit, one guinea.

Obituaries

Joseph Louis Hampson [*Ret. F.*]

We regret to record the death of Joseph Louis Hampson [*Ret. F.*], at the age of 67, who was for many years Senior Assistant in the offices of Messrs. Bradshaw & Gass [*F.*] and Messrs. Briggs, Wolstenholme and Thornely [*F/F.*]. He served his articles in the former office and was elected Associate in 1910 and Fellow in 1926, retiring in 1941.

In the office of Messrs. Bradshaw & Gass he was engaged in the building of Manchester Stock Exchange, West Houghton Town Hall, department stores in Bolton, etc. With Messrs. Briggs, Wolstenholme and Thornely he worked in the Blackburn office from 1910, becoming Senior Assistant in 1912. He was in charge of the work on Blackburn Police Station, King George's Hall, Blackburn, extensions to Blackburn Town Hall, the National Provincial Bank, Palatine Bank, Manchester, and various schools in Lancashire.

He transferred to the firm's Liverpool office in 1926, where he was in charge of the building of the Pavilion Hotel, Southport, Preston Municipal Buildings, Walker Art Gallery extensions, Liverpool, a fire-station in St. Helen's, and various schools and houses. He also executed work on his own account after 1939.

Godfrey L. Clarke [*F.*]

We regret to record the death of Godfrey L. Clarke [*F.*] at the age of 62. Mr. Clarke received his training in the office of Messrs. Bedford and Kitson [*F/F.*], of Leeds, where he won the West Yorkshire Society of Architects Design Prize and Sketching Prize in 1904. After being an assistant to Messrs. Dunn & Watson [*F/F.*], of London, he became Assistant to Sir John Simpson and Maxwell Ayrton [*F/F.*]. He then became Senior Assistant to Mr. Geoffrey Lucas [*F.*], of London, starting in practice on his own account in Keighley, Yorkshire, in 1910. Mr. Clarke became a Licentiate in 1925, in which year he joined the firm of Messrs. Empsall & Clarkson, of Bradford, as partner, passing the R.I.B.A. Fellowship examination in 1929. From that date he was the sole partner of the firm.

In the West Riding of Yorkshire, Mr. Clarke was recognized as an authority upon schools of all kinds. In addition, his work included buildings for many important firms of mill-owners, factories, warehouses, as well as churches and domestic architecture.

Henry Anderson Paley [*A.*]

We regret to record the death of Henry Anderson Paley [*A.*], at the age of 86 years. "Harry" Paley was the only son of Mr. Edward Graham Paley, who was the head of the firm of Austin and Paley, of Lancaster, specialists in ecclesiastical architecture, and went into his father's office in 1877. He was sent by his father to the London office of the late Mr. T. E. Collcutt [*F.*] in order to gain wider experience, but returned to Austin and Paley in 1882, becoming a partner in the firm four years later. He was elected Associate in 1885.

In conjunction with Mr. Austin, who died in 1915, the firm carried out many works in various parts of the country, including about seventy-five churches and restorations and additions to ecclesiastical buildings. Many churches and other great monuments in stone all over the country bear testimony to Mr. H. A. Paley's keen interest in ecclesiastical design. His most important were St. George's, Stockport, St. Silas, Blackburn, St. John, Crawshawbrook, St. Mary's, Widnes, and St. Margaret, Bolton. Mr. Paley's principal buildings in Lancaster, his native town, were the Royal Infirmary and Nurses' Home, the Storey Technical Institute, Art Gallery and School of Art and Nazareth House.

Outside his professional duties, Mr. Paley had a variety of interests, as well as being actively engaged in local government. He was keenly interested in field sports, an enthusiastic angler and an ardent all-round countryman. For the last 44 years he has lived at "Moorgarth," Caton, near Lancaster. He leaves a widow and one daughter, Miss K. H. Paley.

Membership Lists

ELECTION: 25 JUNE 1946

The following candidates for membership were elected on 25 June 1946 :—

AS HON. ASSOCIATE (1)

APPLETON : SIR EDWARD VICTOR, G.B.E., K.C.B., D.Sc., LL.D., F.R.S.

AS FELLOWS (15)

CRICKMAY : COLIN ROSSER [*A.* 1928], Weymouth.
CRICKMAY : HUGH WAYDELIN [*A.* 1931], Weymouth.
DESAI : MORESHWAR GANPATRAO, B.A., Dip.Arch.(Lond.) [*A.* 1936], Madras.
MOORE : CHARLES EDWARD (Capt. Indian Engineers) [*A.* 1934], Melbourne.
PAGE : TERENCE CULMER, A.A.Dip. [*A.* 1935].
TEBBUTT : HENRY JEMSON [*A.* 1920], Hong Kong.

And the following Licentiates who have passed the qualifying examination :—

ALLEN : FREDERICK HOWARD, Plymouth.
DICK : DOUGLAS LOUIS.
FIELD : SIDNEY JOHN.
MACGREGOR : JOHN WISHERT.
MACKEITH : CHARLES HEWITSON, Blackpool.
MELLOR : RICHARD FRANCIS MOUNTFORD.
O'NEILL : GEORGE GORDON.
ROBSON : GEORGE, A.M.T.P.I., Newcastle-upon-Tyne.
WRIGHT : ARTHUR GEORGE BEAUMONT, Trowbridge.

AS ASSOCIATES (19)

ARMSTRONG : DONALD FORBES.
BATLEY : WILFRID PETERJOHN.
BULMER : ARTHUR HERBERT.
COOPER : RAYMOND, Altrincham.
FARROW : WILLIAM RICHARD JOSEPH, Bournemouth.
GUPTE : CHARUDATTA SHANKAR, Bombay.
HATTON : JOHN STANISLAUS, Preston.
JONES : FREDERICK WILLIAM.
KERR : FREDERICK HENRI.
MCDOWALL : MISS BESSIE, Dumfries.
MAHER : MISS MAUREEN HILARY.
MITCHELL : ARCHIBALD DALE.
MOORHEAD : ERIC WILLIAM, B.Arch.(Melb.Univ.), Melbourne.
SATHE : GOVIND GOPAL, Kalyan, Dist. Thana, India.
SAWDAY : JOHN TREVOR, Leicester.
SHELTON : JOSEPH THORNEYCROFT, Newport, Mon.
STODDARD : GILBERT.
UNSWORTH : HERBERT.
WYLDE : JOHN HASLAM, Cowes, I.O.W.

AS LICENTIATES (18)

COLE : HERBERT CRAMER.
GRANTHAM : GEORGE JAMES (Capt.), Birmingham.
HARRINGTON : DOUGLAS WILLIAM.
HATTERSLEY : ROY WILLIAM, Hanley, Stoke-on-Trent.
HOPKINS : RONALD AUSTIN.
HUTCHON : JAMES, Kirkcaldy.
JONES : JOHN LESLIE, Cheltenham.
JONES : JOSEPH GLYNNE, Caernarvon.
KIEFT : FREDERICK GEORGE HENRY.
KNEALE : ANDREW WILSON, Stockport.
KNIGHT : HENRY RONALD EWART.
MACLEOD : JAMES HASTIE, Glasgow.
NICOLSON : MALCOLM, Folkestone.
PRINCE : EDWIN FRANCIS EWART, Liverpool.
SMITH : FRANCIS GILBERT, Prestatyn.
STAZIKER : FRED, Nelson.
SUCH : CYRIL JAMES, Cheltenham.
TOSH : GEORGE SAMSON, Dumfries.

ELECTION: 15 OCTOBER 1946

An election of candidates for membership will take place on 15 October 1946. The names and addresses of the candidates, with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Bye-laws, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, R.I.B.A., not later than Saturday, 10 August.

The names following the applicant's address are those of his proposers.

AS FELLOWS (6)

BATHURST : LESLIE JOHN [*A.* 1922], c/o Messrs. Sir T. P. Bennett & Son, 43 Bloomsbury Square, W.C.1 ; 48 Cascade Avenue, Muswell Hill, N.10. Sir Herbert Baker, A. T. Scott and Sir T. P. Bennett.

BLACKBURN : JACK, Dip.T.P., A.M.T.P.I. [*A.* 1938], Municipal Buildings, Old Hill, Staffs ; 15 Norwood Avenue, Lowton, Warrington, Lancs. H. B. Newbold, J. L. Mulvaney and Percy Bartlett.

KING : WILLIAM HENRY [*A.* 1929], Lloyds Bank Chambers, Vicar Lane, Leeds 1 ; 123 Stonegate Road, Meanwood, Leeds. H. A. Dod, J. J. Joass and N. R. Paxton.

SOMARE : ELLIS EDWARD (Sqdn. Ldr. R.A.F.V.R.) [*A.* 1930], c/o Messrs. Sir T. P. Bennett & Son, 43 Bloomsbury Square, W.C.1 ; "Gwelyon," Houndsden Road, Winchmore Hill, N.21. Sir T. P. Bennett, M. L. Winslade and T. S. Tait.

WESTON : NORMAN ERNEST GODFREY [*A.* 1936], 388 Glossop Road, Sheffield 10 ; Mayfield Lodge, Hallam Grange Rise, Sheffield 10. I. B. Pite, G. H. Foggitt and Edgar Gardham.

And the following Licentiate who has passed the qualifying examination :—

DALE : BERNARD HENRY, Haddon Hall, Ogle Road, Southampton ; 43 Stoneham Lane, Southampton. Ernest Bird, Lieut.-Col. R. F. Gutteridge and G. W. Jackson.

AS ASSOCIATES (4)

The name of a school or schools after a candidate's name indicates the passing of a recognised course.

ENGLESMITH : GEORGE, B.Arch. [Univ. of Liverpool], 4 Callow Street, Chelsea, S.W.3. Prof. Sir Charles Reilly, E. M. Fry and Joseph Emberton.

KNAPTON : ALAN DEREK [Final], 39 Centrecourt Road, Worthing, Sussex. P. K. Hanton, J. L. Denman and K. E. Black.

ROGERS : VERNON WILLIAM [Final], 17 Amersham Hill, High Wycombe, Bucks. E. S. Benson and applying for nomination by the Council under Bye-law 3 (*d*).

WAGG : DONALD [Final], 24 Brownlow Road, Peterborough, Northants. A. W. Wilson, H. J. Wilson and J. G. Warwick.

AS LICENTIATES (16)

ALLEN : LEONARD CLIFFORD, En-Tout-Cas Co., Ltd., Syston, Leicester ; White House, Wanlip, Leicestershire. E. J. Williams and F. H. Jones and applying for nomination by the Council under Bye-law 3 (*d*).

BAIRD : GRAHAM SCOTT, 11 High Street, Budleigh Salterton, Devon ; 1 East Terrace, Budleigh Salterton. Applying for nomination by the Council under Bye-law 3 (*d*).

BEILBY : LESLIE GEORGE, Assistant Surveyor, Flaxton R.D.C., York ; 214 Fulford Road, York. Applying for nomination by the Council under Bye-law 3 (*d*).

COSEDGE : DAVID ERNEST, Borough Engineer's Department, Town Hall, Hammersmith, W.6 ; 42 Broomfield Road, Surbiton, Surrey. J. W. Spink, Stanley Blount and G. H. Gray.

CURTIS : JOHN, Architect's Department, Borough Engineer's Office, Hastings, Sussex ; 38a Ashburnham Road, Hastings. Applying for nomination by the Council under Bye-law 3 (*d*).

GAINSFORD : ALAN PETER, c/o Messrs. Whinney, Son & Austen Hall 37 Norfolk Street, Strand, W.C.2 ; 1 Hilgay Close, Cranley Road, Guildford, Surrey. Applying for nomination by the Council under Bye-law 3 (*d*).

GEORGE : ALFRED, Town Planning Department, County Borough of Merthyr Tydfil ; 7 Courtland Terrace, Merthyr Tydfil, Glamorgan. A. T. Edwards, T. A. Lloyd and Edwin Williams.

GRIFFITHS : JOHN MORGAN GORDON, Wellington House, High Street, Tenby, Pembrokeshire. Applying for nomination by the Council under Bye-law 3 (*d*).

KAY : THOMAS STEPHEN, Surveyor's Department, Borough Hall, Stafford ; 109 Lichfield Road, Stafford. A. C. H. Stillman, C. M. Coombs and E. B. Norris.

KING : JOHN CLIFFORD, East Kesteven R.D.C., Northgate, Sleaford, Lincs. ; 26 The Drove, Sleaford. Applying for nomination by the Council under Bye-law 3 (*d*).

MUIR : CHARLES ROBERTSON, Architectural Department, Corporation of Paisley, 14 Gilmour Street, Paisley ; 57 Colinslee Avenue, Paisley. J. A. Coia and the President and Secretary of the Glasgow Institute of Architects under Bye-law 3 (*a*).

POWELL : THOMAS LEONARD, County Architect's Department, Northamptonshire County Council ; "Moray," North-Western Avenue, Kingsthorpe, Northampton. J. Perkins, F. H. Allen and Walter Rosser.

SLADE : ARTHUR, Architect's Department, L.C.C., County Hall, S.E.1 ; 40 Craignish Avenue, Norbury, S.W.16. R. Wilson, W. J. Durnford and G. W. Home.

STOTT : HUGH RONALD, Architect's Department, Education Offices, Town Hall, Stockport, Cheshire ; 14 The Fairway, Marple Road, Offerton, Stockport. J. H. Worthington, C. Leckenby and J. S. Syme.

WALLER : CHARLES ASHTON, 26 Temple Street, Aylesbury ; Bushey Leys Cottage, Butler's Cross, Aylesbury. H. V. Lobb, R. G. Brocklehurst and E. A. L. Martyn.

WILKINSON : WILLIAM CURRINGTON, c/o A. W. Ruddle, Esq., Long Causeway Chambers, Peterborough ; 46 Queen's Road, Wisbech, Cambs. A. W. Ruddle and applying for nomination by the Council under Bye-law 3 (*d*).

ELECTION : 12 NOVEMBER 1946

An election of candidates for membership will take place on 12 November 1946. The names and addresses of the overseas candidates with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary R.I.B.A. not later than Saturday, 26 October 1946.

AS ASSOCIATES (2)

The names following the applicant's address are those of his proposers:—

BEAGLEY : JOHN CLIFFORD [Passed a qualifying Exam. approved by the R.A.I.A.], No. 8 Flat, "Aylesbury," 163, Queen Street, Woollahra, Sydney, Australia. H. G. Turner, J. C. Fowell and Prof. A. S. Hook.

LAUTENBACH : BASIL GEORGE [Passed a qualifying Exam. approved by the I.S.A.A.], Architectural Branch, City Hall, Cape Town. Prof. L. W. T. White, M. Policansky and H. J. Brownlee.

MEMBERS' COLUMN

This column is reserved for notices of changes of address, partnership and partnerships vacant or wanted, practices for sale or wanted, office accommodation, and personal notices other than for posts wanted as salaried assistants for which the Institute's Employment Register is maintained.

APPOINTMENTS

MR. MAURICE FULLER, F.S.I., Dip.T.P., A.M.T.P.I. [*Student*], Deputy Borough Engineer and Surveyor and Town Planning Officer of Gravesend, has been appointed Planning Officer of the North-East Kent Joint Planning Committee. His address will be Pier Chambers, Medway Street, Chatham. (Chatham 2742.)

MR. ALEX F. WATSON [*A.*] has been appointed resident architect to British European Airways, and would be pleased to receive trade catalogues, etc., at Bourne School, Cavendish Road, Ruislip, Middlesex.

PRACTICES AND PARTNERSHIPS

MR. JOHN L. BAKEWELL [*L.*] (late of Wood and Bakewell (Derby), having been released from military service, has recommenced practice on his own account, due to the death of Mr. George Wood [*A.*], at Quarry House, Ambergate, Derby (Ambergate 59), pending new office accommodation in Belper. He will be pleased to receive trade catalogues, etc.

MESSRS. BARRON, ROOKE & PARTNERS (Mr. E. H. A. Barron, Mr P. W. T. Elford [*L.*], Mr. R. J. Evans [*L.*], and Mr. H. J. Sloggett [*L.*] announce the retirement of Mr. E. H. A. Barron from the partnership existing between them since 1 January 1938. The remaining partners will continue the practice as hitherto under the style of Elford, Evans and Sloggett (successors to Barron, Rooke and Partners) at their present address, 17 Grimstone Terrace, Houndiscombe Road, Plymouth (Plymouth 4106).

MESSRS. CLAYTON & BLACK [*FF.*] have opened a branch office at 16 Church Road, Tunbridge Wells (Tunbridge Wells 1986). The firm's main office remains at 10 Prince Albert Street, Brighton, 1.

MR. MORRIS DE METZ [*F.*] has entered into partnership with Mr. Theo. H. Birks [*F.*], and they are practising under the style of de Metz and Birks, at 2 Ludgate Hill, London, E.C.4 (City 4086/7).

MR. S. F. EVERSON [*A.*] (late Major, R.E.) and Mr. D. F. Searles [*A.*] (late Major, R.E.), on release from the forces have commenced practice at Gordon Lodge, 1 Charlton Road, Blackheath, London, S.E.3.

MR. H. A. HILL [*A.*] has entered into partnership with Mr. T. A. Page [*F.*], and they are practising under the style of T. A. Page, Son and Hill, at 75 King Street, South Shields (South Shields 476).

MR. H. KENCHINGTON [*F.*], Mr. K. W. Farms [*A.*] and Mrs. M. F. Farms [*A.*] have entered into partnership and will continue to practise at 130 Crawford Street, London, W.1 (Welbeck 5370). The firm will be known as Kenchington and Farms.

MISS JUNE PARK [*A.*] is now practising at 35 Royal Avenue, London, S.W.3, and will be pleased to receive trade catalogues, etc.

MR. DENIS POULTON [*F.*] and Mr. Philip Freeman [*A.*] have entered into partnership and are now practising under the style of Poulton and Freeman, at 96 Dorset House, Gloucester Place, London, N.W.1 (Welbeck 8898).

MR. WILLIAM ROSS [*F.*] (formerly of 189 Pitt Street, Glasgow, C.2) has resumed practice at 5 Clarendon Place, Dunblane, Perthshire (Dunblane 3112), where he will be pleased to receive trade catalogues, etc.

MR. HAROLD O. SAMSON [*L.*] and Mr. W. Bunter Colthurst [*A.*] have taken into partnership Mr. Louis G. Steer [*A.*] and they will practise under the style of Samson, Colthurst & Steer, at 1 Hammet Street, Taunton, and 51 High Street, Bridgwater (Bridgwater 2560).

MR. F. E. WILKINS [*L.*], of 52, Haselbury Road, Edmonton, London, N.18, has opened a further office at c/o Geo. Moss & Sons, Ltd., Cranleigh Gardens, Southall (Southall 1183), where he will be pleased to receive trade catalogues, etc.

MR. ALFRED WOMERSLEY [*L.*] has relinquished his appointment as Assistant Architect, Borough Engineer's Office, Hastings, and has commenced practice at 17 Grand Parade, St. Leonards-on-Sea, Sussex (St. Leonards 946), incorporating the practice of the late Mr. Percy Oxley, F.I.A.A. He will be pleased to receive trade catalogues, etc.

CHANGES OF ADDRESS

MR. J. G. DEFRIES [*A.*] has removed to 9 Greycoat Gardens, Greycoat Place, London, S.W.1.

MR. W. W. FISK [*A.*] and Mr. S. F. Burley [*L.*], practising as Fisk and Burley, have removed from 52 Gwalior House, Chase Road, Southgate, London, N.14, to 16 King Street, Cheapside, London, E.C.2 (Monarch 5896), where they will be pleased to receive trade catalogues, etc.

MESSRS. BERNARD GOLD & PARTNERS [*A.*] have removed from Roxburghe House, Regent Street, London, W.1, to 4 & 5 Grosvenor Street, W.1 (Mayfair 3811).

MR. GEORGE LOWE [*A.*] has removed his office to 3a George Street, Croydon (Croydon 0660), where he will be pleased to receive trade catalogues, etc.

MR. P. EVANS PALMER [*A.*] has removed to 19 The Causeway, Horsham, Sussex (Horsham 29), where he will be pleased to receive trade catalogues, etc.

MR. CLIVE PASCALL [*A.*] has removed to 22 Great James Street, London, W.C.1 (Holborn 6141), where he will be pleased to receive trade catalogues, etc.

PRACTICES AND PARTNERSHIPS WANTED AND AVAILABLE

ASSOCIATE, age 35, seeks partnership, South-West of England, in established firm.—Apply Box 268, c/o The Secretary, R.I.B.A.

ASSOCIATE, age 39, ex Major, G.S., seeks partnership or post with view to partnership in London area, preferably central. Wide general experience and abilities.—Apply Box 270, c/o The Secretary, R.I.B.A.

FOR SALE. Old established practice of deceased architect in Surrey town. Well-equipped and central, modern offices.—Apply Box 269, c/o The Secretary, R.I.B.A.

FOR SALE, owing to death of the principal, good general architectural practice in central Liverpool. Established over 20 years.—Apply Box 276, c/o The Secretary, R.I.B.A.

LICENTIATE (late Captain, R.E., Garrison Engineer, India), recently released, desires partnership. Twelve years own practice pre-war. Good connections. Own architectural and surveying instruments. Small capital available. South Coast preferred.—Apply Box 271, c/o The Secretary, R.I.B.A.

PARTNERSHIP offered in busy practice in West Midlands City for member of R.I.B.A. Vacancy Christmas, 1946. Capital about £2,000 minimum.—Apply Box 273, c/o The Secretary, R.I.B.A.

SURVIVING partner of an established North country practice offers an opening to a young and energetic Associate of sound character, with early partnership.—Apply Box 277, c/o The Secretary, R.I.B.A.

WANTED AND FOR SALE

FOR SALE. Associate has few rolls perfect tracing cloth, size 30 in. by 24 yds., and 40 ins. by 24 yds.—Apply Box 275, c/o The Secretary, R.I.B.A.

WANTED. Member requires pelican pen and nibs.—Apply Box 278, c/o The Secretary, R.I.B.A.

ACCOMMODATION

ASSOCIATE requires three-room offices or two rooms and share secretary's office with other architects, London, S.W.1 or W.1 area.—Apply Box 272, c/o, The Secretary R.I.B.A.

MEMBER requires office accommodation, W.C.1 area—3-4 rooms, about 1,000 sq. ft. Would consider purchase of furniture.—Apply Box 279, c/o The Secretary, R.I.B.A.

MEMBER requires office accommodation, West or West Central, London district, 2-3 rooms or 6—800 ft. space required; long lease preferred.—Apply Box 274, c/o The Secretary, R.I.B.A.

MEMBERS RELEASED FROM THE SERVICES, ETC.

The following members have notified the R.I.B.A. that they have been released from the Services and are resuming practice and would like to receive trade catalogues, information sheets and other data, etc.:

MR. E. E. BEDDINGFIELD [*A.*] (late Capt., R.E.), 20 Park Place, Cheltenham.

MR. G. E. CASSIDY [*A.*] (late Major, R. Sigs.), 61 The Green, Kew, Surrey.

MR. K. J. CATON [*A.*], Borough Architect's Department, Town Hall, Reading.

MR. GRAHAME G. COOKE [*A.*], 80, Regent's Road, Handsworth, Birmingham, 21.

MR. JAMES H. COX [*A.*] (late Major R.E.), 9 Broughton Avenue, Aylesbury, Bucks.

MR. R. V. DAVIS [*A.*], Loveday and Davies, 2a Lawrence Sheriff Street, Rugby (Rugby 2394).

MAJOR W. H. GODWIN [*F.*], Messrs. Pritchard, Godwin and Clist, Bank Buildings, Kidderminster.

MR. W. N. HAWKES [*A.*], Messrs. Harry Bloomer & Son, 14 Temple Street, Birmingham, 2; trade catalogues, etc., to 253 High Street, Henley-in-Arden.

MR. MAURICE A. H. HOBBISS, M.A. [*A.*], 36, Waterloo Street, Birmingham, 2 (Birmingham, Central 3401).

MR. W. A. L. HOPKINS [*A.*], Architect's Department, Surrey County Council: private address, 52 Alleyn Road, West Dulwich, London, S.E.21.

MR. ARTHUR LAZENBY [*A.*], 50A Savile Street, Hull, Yorkshire (Hull 31221).

MR. C. A. R. NORTON [*A.*] (late Major, R.E.), 9, Wood Lane London, N.6 (Tudor 7126).

MR. B. F. RATCLIFFE [*A.*], Architects' Department, Middlesex County Council: private address, "Southfields," 1 Clewer Hill Road, Windsor.

MR. T. F. SAYER [*L.*], 24 Harlington Road East, Feltham, Middlesex.

MR. C. A. SPIVEY [*A.*] (late Major, R.E.), c/o 10 Woodlands Avenue, Stretford, near Manchester.

MR. ALUN AETHWY THOMAS [*A.*] (late Capt., R.E.), 21 Upper Montagu Street, London, W.1.

MR. REGINALD H. TRELEAVEN [*A.*], 1 Bloomsbury Square, London, W.C.1.

MR. C. G. VAUGHAN [*L.*], 12 Christina Street, Swansea (Swansea 3529).

MR. HENRY C. WEEGMAN [*A.*], "The Elders," Bramhope, near Leeds.

"A. B. S."

HOUSE-PURCHASE SCHEME.

REVISED TERMS.

ADVANCES: Up to 80 per cent. of a reasonable valuation.

INTEREST: 4 per cent. gross.

REPAYMENT: By means of an Endowment Assurance term not exceeding 25 years.

No legal costs charged by the Office on repayment of mortgage.

Particulars from: The Secretary, A.B.S. Insurance Department, 66, Portland Place, London, W. 1.
(Tel: WELbeck 5721.)